

*Subject to compliance by the City with certain covenants, in the opinion of Co-Bond Counsel, under present law, interest on the Bonds is excluded from the gross income of the owners thereof for federal income tax purposes and is not included as an item of tax preference for purposes of the federal alternative minimum tax. Interest on the Bonds is not exempt from present State of Illinois income taxes. See “TAX MATTERS” herein for a more complete discussion.*



**\$576,415,000**  
**CITY OF CHICAGO**

**\$254,210,000**  
**Second Lien Water**  
**Revenue Bonds, Project Series 2023A**

**\$322,205,000**  
**Second Lien Water**  
**Revenue Bonds, Refunding Series 2023B**

**Dated: Date of Delivery**

**Due: As Shown on the Inside Cover**

This Official Statement contains information relating to the City of Chicago (the “City”) Second Lien Water Revenue Bonds, Project Series 2023A (the “Series 2023A Bonds”) and the Second Lien Water Revenue Bonds, Refunding Series 2023B (the “Series 2023B Bonds”) and together with the Series 2023A Bonds, the “Series 2023 Bonds” or the “Bonds”) which will be issued pursuant to an Amended and Restated Master Indenture of Trust Securing City of Chicago Second Lien Water Revenue Bonds, dated as of May 1, 2023 (the “Master Indenture”), from the City to The Bank of New York Mellon Trust Company, N.A., as trustee (as successor to American National Bank and Trust Company of Chicago and J.P. Morgan Trust Company, National Association) (the “Trustee”), as supplemented by the First through Eleventh Supplemental Indentures Securing Second Lien Water Revenue Bonds (the “Prior Supplemental Indentures”) and by the Thirteenth Supplemental Indenture Securing Second Lien Water Revenue Project and Refunding Bonds, Series 2023 dated as of May 1, 2023. The Master Indenture amends and restates the Master Indenture of Trust Securing City of Chicago Second Lien Water Revenue Bonds, dated as of December 15, 1999, from the City to the Trustee, as amended by Amendment No.1 to Master Indenture dated as of August, 1, 2004 and as further supplemented by the Prior Supplemental Indentures (as so supplemented and amended, the “Original Indenture”) pursuant to which all previously issued series of Second Lien Bonds were issued, and amends portions of each of the respective ordinances authorizing such previously issued series of Second Lien Bonds.

***As of the date hereof, there are no Outstanding Senior Lien Bonds, and the City has covenanted under the Master Indenture not to issue any obligations with a claim to Net Revenues of the Water System senior to that of the Second Lien Water Revenue Bonds, including the Bonds.***

The Bonds will be issuable as fully registered bonds in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository for the Bonds. Purchasers of the Bonds will not receive certificates representing their interests in the Bonds purchased. The Bonds will be issued in denominations of \$5,000 or any integral multiple thereof. Interest on the Bonds is payable on each May 1 and November 1, with the first interest payment date being November 1, 2023. Principal of the Bonds is payable at maturity. Principal of and interest on the Bonds will be paid by the Trustee to DTC, which in turn will remit such principal and interest payments to its participants for subsequent disbursement to the beneficial owners of the Bonds. As long as Cede & Co. is the registered owner as nominee of DTC, payments on the Bonds will be made to such registered owner, and disbursement of such payments to beneficial owners will be the responsibility of DTC and its participants. See “DESCRIPTION OF THE BONDS – Book-Entry Only System” herein.

The Bonds are subject to redemption prior to maturity as described in this Official Statement. See “DESCRIPTION OF THE BONDS – Redemption” herein.

The Bonds are limited obligations of the City having a claim for payment of principal and interest solely from the Net Revenues pledged to their payment as described herein. The Bonds have a claim for payment from the Net Revenues on an equal and ratable basis with the City’s Outstanding Second Lien Bonds and any Second Lien Parity Bonds that may be issued from time to time in the future.

The City will use the proceeds from the sale of the Series 2023A Bonds to (i) pay for certain costs of the Projects (as defined herein) and (ii) pay costs of issuance of the Series 2023A Bonds. The City will use the proceeds from the sale of the Series 2023B Bonds to (i) refund certain of the City’s outstanding Second Lien Water Revenue Bonds (the “Refunded Bonds”), (ii) pay for certain costs of the Projects and (iii) pay costs of issuance of the Series 2023B Bonds. See “PLAN OF FINANCING” and “SOURCES AND USES OF PROCEEDS” herein.

The scheduled payment of principal of and interest on all of the Series 2023A Bonds and on the Series 2023B Bonds maturing on November 1 of the years 2028 through 2040, inclusive (collectively, the “Insured Bonds”), when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Insured Bonds by **ASSURED GUARANTY MUNICIPAL CORP.**



**THE BONDS DO NOT CONSTITUTE AN INDEBTEDNESS OF THE CITY WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY PROVISION OR LIMITATION AS TO INDEBTEDNESS. THE BONDS DO NOT HAVE A CLAIM FOR PAYMENT FROM ANY TAXES OF THE CITY. THE BONDS ARE NOT SECURED BY A LIEN ON OR A SECURITY INTEREST IN THE PHYSICAL ASSETS OF THE WATER SYSTEM. THE CITY SHALL NOT BE OBLIGATED TO PAY THE BONDS EXCEPT FROM THE REVENUES PLEDGED TO THEIR PAYMENT. NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY, THE STATE OF ILLINOIS OR ANY POLITICAL SUBDIVISION OF THE STATE OF ILLINOIS IS PLEDGED TO THE PAYMENT OF THE BONDS.**

**Maturities, Principal Amounts, Interest Rates, Prices, Yields and CUSIP Numbers are set forth on the inside of this cover page.**

*The Bonds are offered when, as and if issued, and accepted by the Underwriters, subject to delivery of separate approving legal opinions by Miller, Canfield, Paddock and Stone, P.L.C., Chicago, Illinois, and Golden Holley James LLP, Chicago, Illinois, Co-Bond Counsel, and to certain other conditions. Certain legal matters will be passed upon for the City by (i) its Acting Corporation Counsel, and (ii) in connection with the preparation of this Official Statement, Cotillas and Associates and Burke Burns and Pinelli, Ltd., Co-Disclosure Counsel to the City. Certain legal matters will be passed upon for the Underwriters by Chico & Nunes, P.C., Chicago, Illinois. It is expected that the Bonds will be available for delivery through the facilities of DTC on or about May 9, 2023.*

**Mesirow Financial, Inc.**

**Estrada Hinojosa  
Blaylock Van, LLC**

**Wells Fargo Securities**

**San Blas Securities, LLC Bancroft Capital, LLC Janney Montgomery Scott Harvestons Securities, Inc. Academy Securities**

**MATURITIES, PRINCIPAL AMOUNTS, INTEREST RATES, PRICES, YIELDS AND CUSIP NUMBERS**

**\$254,210,000  
CITY OF CHICAGO  
Second Lien Water Revenue Bonds,  
Project Series 2023A**

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\$38,010,000 5.250% Term Bonds due November 1, 2048, Price 109.424<sup>c</sup>, Yield 4.090%, CUSIP<sup>†</sup>: 167736 U88  
\$59,875,000 5.250% Term Bonds due November 1, 2053, Price 108.570<sup>c</sup>, Yield 4.190%, CUSIP<sup>†</sup>: 167736 U96  
\$12,000,000 5.000% Term Bonds due November 1, 2058, Price 104.863<sup>c</sup>, Yield 4.340%, CUSIP<sup>†</sup>: 167736 V20  
\$144,325,000 5.500% Term Bonds due November 1, 2062, Price 110.592<sup>c</sup>, Yield 4.190%%, CUSIP<sup>†</sup>: 167736 V38

All of the Series 2023A Bonds are insured by Assured Guaranty Municipal Corp.

<sup>c</sup> All Series 2023A Bonds are priced to the first Optional Redemption Date of May 1, 2033, except for the November 1, 2058 Maturity which is priced to its first Optional Redemption Date of May 1, 2032.

<sup>(†)</sup> CUSIP data herein is provided by CUSIP Global Services (“CGS”). CGS is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. Neither the City, the Financial Advisors nor the Underwriters (as defined herein) or their agents or counsel is responsible for the selection, use or accuracy of the initial CUSIP numbers nor is any representation made as to their correctness with respect to the Series 2023A Bonds as included herein or at any time in the future. The initial CUSIP number for a specific series, maturity, interest rate, and call date is subject to being changed after the issuance of the Series 2023A Bonds, as a result of various subsequent actions including, but not limited to, a refunding in whole or in part, or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2023A Bonds.

**MATURITIES, PRINCIPAL AMOUNTS, INTEREST RATES, PRICES, YIELDS AND CUSIP NUMBERS**

**\$322,205,000  
CITY OF CHICAGO  
Second Lien Water Revenue Bonds,  
Refunding Series 2023B**

<b>Maturity (November 1)</b>	<b>Principal Amount</b>	<b>Interest Rate</b>	<b>Price</b>	<b>Yield</b>	<b>CUSIP<sup>(†)</sup></b>
2023	\$ 7,500,000	5.000%	100.821	3.250%	167736 V46
2024	\$20,000,000	5.000%	102.460	3.280%	167736 V53
2025	\$10,000,000	5.000%	104.692	3.020%	167736 V61
2028	\$ 2,500,000	5.000%	110.939	2.830%	167736 V79
2029	\$ 5,000,000	5.000%	112.760	2.830%	167736 V87
2030	\$ 7,500,000	5.000%	114.387	2.850%	167736 V95
2031	\$40,000,000	5.000%	115.682	2.900%	167736 W29
2032	\$40,000,000	5.000%	116.236 <sup>c</sup>	2.930%	167736 W37
2033	\$15,000,000	5.000%	115.808 <sup>c</sup>	2.980%	167736 W45
2034	\$20,000,000	5.000%	115.043 <sup>c</sup>	3.070%	167736 W52
2035	\$25,000,000	5.000%	113.948 <sup>c</sup>	3.200%	167736 W60
2036	\$30,000,000	5.000%	112.701 <sup>c</sup>	3.350%	167736 W78
2037	\$20,000,000	5.000%	111.470 <sup>c</sup>	3.500%	167736 W86
2038	\$20,000,000	5.000%	110.335 <sup>c</sup>	3.640%	167736 W94
2039	\$28,785,000	5.000%	109.933 <sup>c</sup>	3.690%	167736 X28
2040	\$30,920,000	4.000%	98.637	4.110%	167736 X36

All of the Series 2023B Bonds except those maturing on November 1, 2023, 2024 and 2025 are insured by Assured Guaranty Municipal Corp.

<sup>c</sup> Series 2023B Bonds maturing on and after November 1, 2032 except for the 2040 maturity are priced to call on the first Optional Redemption Date of May 1, 2032.

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<sup>(†)</sup> CUSIP data herein is provided by CUSIP Global Services (“CGS”). CGS is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. Neither the City, the Financial Advisors nor the Underwriters (as defined herein) or their agents or counsel is responsible for the selection, use or accuracy of the initial CUSIP numbers nor is any representation made as to their correctness with respect to the Series 2023B Bonds as included herein or at any time in the future. The initial CUSIP number for a specific series, maturity, interest rate, and call date is subject to being changed after the issuance of the Series 2023B Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part, or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2023B Bonds.

**CITY OF CHICAGO**

**MAYOR**

Lori E. Lightfoot

**CITY CLERK**

Andrea M. Valencia

**CITY TREASURER**

Melissa Conyears-Ervin

**CITY COUNCIL**

**COMMITTEE ON FINANCE**

Scott Waguespack, Chairman

**CHIEF FINANCIAL OFFICER**

Jennie Huang Bennett

**CITY COMPTROLLER**

Reshma Soni

**BUDGET DIRECTOR**

Susie Park

**ACTING CORPORATION COUNSEL**

John L. Hendricks, Esq.

**DEPARTMENT OF WATER MANAGEMENT**

Andrea R.H. Cheng, Commissioner

**CO-BOND COUNSEL**

Miller, Canfield, Paddock and Stone, P.L.C

Chicago, Illinois

Golden Holley James LLP

Chicago, Illinois

**CO-DISCLOSURE COUNSEL**

Cotillas and Associates

Chicago, Illinois

Burke Burns and Pinelli, Ltd.

Chicago, Illinois

**FINANCIAL ADVISORS**

PFM Financial Advisors LLC

Chicago, Illinois

Sycamore Advisors LLC

Chicago, Illinois

## REGARDING THE USE OF THIS OFFICIAL STATEMENT

This Official Statement is being used in connection with the sale of the Bonds and may not be reproduced or used, in whole or in part, for any other purpose. Certain information contained in this Official Statement has been obtained by the City from DTC and other sources that are deemed to be reliable; however, no representation or warranty is made as to the accuracy or completeness of such information by the City. The delivery of this Official Statement at any time does not imply that information herein is correct as of any time subsequent to its date.

No dealer, broker, salesperson or any other person has been authorized by the City or the Underwriters to give any information or to make any representation other than as contained in this Official Statement in connection with the offering described herein and, if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than those described on the cover page, nor shall there be any offer to sell, solicitation of an offer to buy, or sale of such securities in any jurisdiction in which it is unlawful to make such offer, solicitation or sale. Neither this Official Statement nor any statement that may have been made verbally or in writing is to be construed as a contract with the registered or beneficial owners of the Bonds.

This Official Statement should be considered in its entirety, and no one factor considered more or less important than any other by reason of its position in this Official Statement. Where statutes, reports or other documents are referred to herein, reference should be made to such statutes, reports or other documents in their entirety for more complete information regarding the rights and obligations of parties thereto, facts and opinions contained therein and the subject matter thereof.

**This Official Statement, including the Appendices, contains certain opinions, estimates, projections and forward-looking statements and information that are based on the City's beliefs as well as assumptions made by and information currently available to the City. Such opinions, estimates, projections and forward-looking statements set forth in this Official Statement were not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to prospective financial information, but, in the view of the City, were prepared on a reasonable basis, reflect its best currently available estimates and judgments, and present, to the best of the City's knowledge and belief, the expected course of action and the expected future financial performance of the City. However, this information is not fact and should not be relied upon as being necessarily indicative of future results, and readers of this Official Statement are cautioned not to place undue reliance on such opinions, statements or prospective financial information.**

Any statements made in this Official Statement, including the Appendices, involving matters of opinion, forecasts, projections or estimates, whether or not so expressly stated that are based on expectations and assumptions which existed at the time such forecasts, projections and estimates were prepared, are set forth as such and not as representations of fact, and the inclusion in this Official Statement of such opinions, forecasts, projections and estimates should not be regarded as a representation by the City that such opinions, forecasts, projections and estimates will occur or be realized. Such opinions, forecasts, projections and estimates are not intended as representations of fact or guarantees of results. Such statements are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or expected. See *"INVESTMENT CONSIDERATIONS – Forward-Looking Statements," "FINANCIAL OPERATIONS – Financial Policies," – "Historical and Projected Financial Operations" and "Pension Costs."*

The summaries or descriptions contained herein of provisions of the Ordinance, the Indenture, the Undertaking (each as hereinafter defined) and the Bonds, and all references to other materials not purporting to be quoted in full, are qualified in their entirety by reference to the complete provisions of the documents and other materials summarized or described. Copies of these documents may be obtained from the office of the City's Chief Financial Officer.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their responsibility to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The prospective financial information set forth in this Official Statement, except for certain information sourced to parties other than the City, is solely the product of the City. Neither the City's independent auditors nor any other independent auditors have compiled, examined, or performed any procedures with respect to, or been consulted in connection with the preparation of, the prospective financial information and forward-looking statements contained herein. The City's independent auditors assume no responsibility for the content of the prospective financial information set forth in this Official Statement, including any estimates, disclaim any association with such prospective financial information, and have not, nor have any other independent auditors, expressed any opinion or any other form of assurance on such information or its achievability.

Assured Guaranty Municipal Corp. ("AGM") makes no representation regarding the Bonds or the advisability of investing in the Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or

omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented herein under the heading “BOND INSURANCE” and APPENDIX G – “SPECIMEN MUNICIPAL BOND INSURANCE POLICY.”

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader’s convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement. Furthermore, any information obtained from such websites and presented herein or references to such websites not purporting to be quoted in full are qualified in their entirety by reference to the complete contents of the website summarized or described. References to website addresses are current as of the date of this Official Statement. The City is under no obligation to update any website references or references to information contained therein.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED OR RECOMMENDED BY THE SECURITIES AND EXCHANGE COMMISSION, ANY STATE SECURITIES COMMISSION, OR ANY OTHER REGULATORY AUTHORITY NOR HAS THE SECURITIES AND EXCHANGE COMMISSION, ANY STATE SECURITIES COMMISSION, OR ANY OTHER REGULATORY AUTHORITY PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

THE BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, NOR HAS THE INDENTURE BEEN QUALIFIED UNDER THE TRUST INDENTURE ACT OF 1939, AS AMENDED, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACTS. THE REGISTRATION OR QUALIFICATION OF THE BONDS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF LAW OF THE STATES IN WHICH THE BONDS HAVE BEEN REGISTERED OR QUALIFIED AND THE EXEMPTION FROM REGISTRATION OR QUALIFICATION IN OTHER STATES CANNOT BE REGARDED AS A RECOMMENDATION THEREOF.

IN CONNECTION WITH THE OFFERING OF THE BONDS, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICES OF THE BONDS AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE PRICES AND OTHER TERMS RESPECTING THE OFFERING AND SALE OF THE BONDS MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS AFTER THE BONDS ARE RELEASED FOR SALE, AND THE BONDS MAY BE OFFERED AND SOLD AT PRICES OTHER THAN THE INITIAL OFFERING PRICES, INCLUDING SALES TO DEALERS WHO MAY SELL THE BONDS INTO INVESTMENT ACCOUNTS.

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# OFFICIAL STATEMENT

**\$576,415,000**  
**CITY OF CHICAGO**

**\$254,210,000**  
**SECOND LIEN WATER REVENUE BONDS,**  
**PROJECT SERIES 2023A**

**\$322,205,000**  
**SECOND LIEN WATER REVENUE BONDS,**  
**REFUNDING SERIES 2023B**

## INTRODUCTION

This Official Statement, including the cover page, inside cover page, and the Appendices, sets forth certain information in connection with the sale and issuance of \$254,210,000 principal amount of Second Lien Water Revenue Bonds, Project Series 2023A (the “Series 2023A Bonds”) and of \$322,205,000 principal amount Second Lien Water Revenue Bonds, Refunding Series 2023B (the “Series 2023B Bonds”) and together with the Series 2023A Bonds, the “Series 2023 Bonds” or the “Bonds,” and each a “Series”) of the City of Chicago (the “City”) which are to be issued pursuant to the terms of the Ordinance and the Indenture (each as defined below). All capitalized terms used in this Official Statement and not otherwise defined herein have the meanings provided in APPENDIX A – “GLOSSARY OF CERTAIN TERMS.”

### Purpose

The proceeds from the sale of the Series 2023A Bonds will be used to (i) pay for certain costs of the Projects and (ii) pay for costs of issuance of the Series 2023A Bonds.

The proceeds of the Series 2023B Bonds will be used to (i) refund certain of the City’s outstanding Second Lien Water Revenue Bonds (the “Refunded Bonds”), (ii) pay for certain costs of the Projects and (iii) pay for costs of issuance of the Series 2023B Bonds. See “PLAN OF FINANCING” and “SOURCES AND USES OF PROCEEDS.”

### Authorization

The Bonds are being issued pursuant to the constitutional home rule powers of the City. The Bonds were authorized under an ordinance duly adopted by the City Council of the City of Chicago (the “City Council”) on June 27, 2018 (the “2018 Ordinance”), as amended by an ordinance duly adopted by the City Council on October 27, 2021 (the “2021 Ordinance” and collectively with the 2018 Ordinance, the “Original Bond Ordinances”) as further amended by an ordinance adopted by the City Council on November 7, 2022 (together with the Original Bond Ordinances, the “Ordinance”). The Bonds are also being issued pursuant to an Amended and Restated Master Indenture of Trust Securing City of Chicago Second Lien Water Revenue Bonds, dated as of May 1, 2023 (the “Master Indenture”), from the City to The Bank of New York Mellon Trust Company, N.A., as trustee (the “Trustee”) and as supplemented by the Thirteenth Supplemental Indenture Securing Second Lien Water Revenue Project and Refunding Bonds, Series 2023, dated as of May 1, 2023 (the “Thirteenth Supplemental Indenture” and collectively with the Master Indenture, the “Indenture”).

Pursuant to the Twelfth Supplemental Indenture Securing Second Lien Water Revenue Project and Refunding Bonds, Series 2023, dated as of May 1, 2023 (the “Twelfth Supplemental Indenture”), the Master Indenture (i) amends and restates the Master Indenture of Trust Securing City of Chicago Second

Lien Water Revenue Bonds, dated as of December 15, 1999, from the City to the Trustee (as successor to American National Bank and Trust Company of Chicago and J.P. Morgan Trust Company, National Association), as amended by Amendment No. 1 to Master Indenture dated as of August, 1, 2004 (as so supplemented and amended, the “Original Master Indenture”), pursuant to which all previously issued series of Second Lien Bonds were issued, and such Original Master Indenture as further supplemented by the First through Eleventh Supplemental Indentures Securing Second Lien Water Revenue Bonds (collectively, and together with the Original Master Indenture, the “Original Indenture”) also pursuant to which all previously issued respective series of Second Lien Bonds were issued, and (ii) amends portions of the Ordinance and of each of the respective ordinances authorizing such previously issued series of Second Lien Bonds.

### **Lien Status and Security for the Bonds**

*As part of the amendments effected by the Master Indenture to the Original Indenture, the City has covenanted not to issue any obligations with a claim to Net Revenues of the Water System senior to that of the Second Lien Water Revenue Bonds, including the Bonds. Under the Master Indenture, only additional Second Lien Water Revenue Bonds on parity with the Bonds and obligations subordinated to the Bonds may be issued. See “SECURITY FOR THE BONDS – General” and “– Flow of Funds.”*

The Bonds are limited obligations of the City having a claim for payment of principal, redemption premium, if any, and interest solely from amounts in the Second Lien Bonds Account (other than monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued), the sources pledged under the Indenture and amounts on deposit in Accounts established by the Indenture and related to the Bonds and, together with any Outstanding Second Lien Bonds, Second Lien Parity Bonds, Section 2.08 Obligations and Section 2.09 Obligations, from Net Revenues. A lien on and security interest in Net Revenues (except for monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued) is granted to the Registered Owners of the Second Lien Bonds Outstanding from time to time, and a lien on amounts in any Accounts related to the Bonds is granted to the Registered Owners of the Bonds Outstanding from time to time, subject to amounts in those Accounts being deposited, credited and expended as provided in the Indenture. The claim of the Bonds to payment from amounts in the Water Fund is subordinate to the claim of the Senior Lien Rebate Fund. See “SECURITY FOR THE BONDS – General” and “– Flow of Funds.”

*The Bonds are not secured by a lien on or security interest in the physical assets of the Water System, including the Projects. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness, and neither the full faith and credit nor taxing power of the City, the State of Illinois or any political subdivision of the State of Illinois is pledged to the payment of the Bonds.*

### **Redemption**

The Bonds are subject to redemption prior to maturity as described under the caption “DESCRIPTION OF THE BONDS – Redemption.”

### **Rate Covenant**

The City has covenanted (the “Rate Covenant”) in the Master Indenture to establish, maintain, and collect at all times, the fees, charges and rates for the use and service of the Water System sufficient at all times to pay Operation and Maintenance Costs and produce Net Revenues Available for Bonds in

each period beginning January 1 and ending December 31 of each year (a “Fiscal Year”) at least equal to the sum of:

- (A) the Aggregate Second Lien Bonds Requirement for the Fiscal Year on all Second Lien Bonds Outstanding, plus
- (B) 110 percent of the Subordinate Lien Debt Service Requirement for the Fiscal Year on all Subordinate Lien Obligations Outstanding, plus
- (C) the annual debt service requirement for the Fiscal Year on all Commercial Paper Notes Outstanding, plus
- (D) the annual debt service requirement for the Fiscal Year on all Water System Line of Credit Notes Outstanding.

These fees, charges and rates shall not be reduced, while any Second Lien Bonds are Outstanding, below the level necessary to ensure compliance with the covenants set forth above. The City will conduct an annual review of Water System rates to determine if the City has been and will be in compliance with the Rate Covenant described above. Whenever the annual review indicates that projected Gross Revenues will not be sufficient to comply with the Rate Covenant, the City will prepare or have prepared a rate study for the Water System identifying the rate changes necessary to comply with the Rate Covenant and the Office of Budget and Management (the “Budget Office”) and the Chief Financial Officer (the “Chief Financial Officer”) will recommend appropriate action to the City Council to comply with the Rate Covenant, which may include rate increases and/or expenditure reductions. See “FINANCIAL OPERATIONS – Annual Budget Review and Implementation of Annual Budget.”

### **Bond Insurance**

The scheduled payment of principal of and interest on all of the Series 2023A Bonds and on the Series 2023B Bonds maturing on November 1 of the years 2028 through 2040, inclusive (collectively, the “Insured Bonds”), when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Insured Bonds by **ASSURED GUARANTY MUNICIPAL CORP.** For additional information regarding AGM and the Policy (as defined below), see “BOND INSURANCE” and APPENDIX G – “SPECIMEN MUNICIPAL INSURANCE POLICY.” For provisions of the Indenture related to rights of AGM, see APPENDIX B – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

### **City of Chicago Water System**

The City owns and operates a municipal water system (the “Water System”) that provides supply, treatment, and distribution of water to customers in the City and to 120 suburban communities. The Water System includes all property, real, personal or otherwise, owned or to be owned by the City or under the control of the City and used for water supply, distribution or collection purposes, and any and all further extensions, improvements and additions to the Water System. The Water System currently serves a population of 5.3 million, or approximately 42% of the population of the State of Illinois. The Water System’s water is allocated from Lake Michigan pursuant to regulations of the Illinois Department of Natural Resources. See “WATER SYSTEM SERVICE AREA – Lake Michigan Allocations.”

As of December 31, 2022, the Water System supplied water to a service area of approximately 806 square miles. The City accounted for approximately 228 square miles of this service area and the suburban customers accounted for approximately 555 square miles. The City considers it likely that a

material number of current suburban customers will continue to purchase water from the Water System under these contracts for the following reasons: (i) large capital investments would be required for those customers otherwise to obtain water from Lake Michigan; (ii) the Water System provides a reliable supply of water; (iii) demand for available groundwater exceeds its potential yield; and (iv) the quality of Lake Michigan water is superior to local groundwater. In 2022, the suburban customers accounted for approximately 38.8% of water pumpage and approximately 48 percent of net water sales of the Water System.

### **Water System Rates**

Water System rates are set by the City Council. No regulation by any administrative agency applies to the Water System rates.

The Water System rates for metered accounts are based on a dollar rate per thousand cubic feet. The assessment of non-metered users is based on a formula related to the size of the relevant property and other use-related factors. Beginning June 1, 2016, and every year thereafter, annual Water System rates are required to be adjusted, if applicable, by applying to the previous year's rates the rate of inflation, calculated based on the Consumer Price Index – Urban Wage Earners and Clerical Workers (Chicago All Items) published by the United States Bureau of Labor Statistics for the 365-day period ending on the most recent January 1. Any such annual increase, however, shall be capped at 5% of the previous year's rate. Annual Water System rates are effective June 1 of each year until May 31 of the following year. As of June 1, 2022, Water System rates were \$4.33 per 1,000 gallons of water. On June 1, 2023, the Water System rate will increase by 5 percent to \$4.55 per 1,000 gallons of water. The City Council may take action at any time to alter the then-current schedule of water rates. See "FINANCIAL OPERATIONS." Beginning in 2030, the City intends to commence transitioning from its current uniform rate for suburban customers to a rate based upon cost of service. See "FINANCIAL OPERATIONS – Transition to AWWA Cost-of-Service Water Rate Methodology for Suburban Customers."

### **Recent Developments regarding the City of Chicago and the Office of Mayor**

As presented on the third inside cover page, as of the date of this Official Statement, Lori E. Lightfoot serves as the Mayor of the City of Chicago (the "Mayor"). On April 4, 2023, Brandon Johnson was elected to serve as Mayor. Mr. Johnson is scheduled to be sworn in as Mayor on May 15, 2023. The new Mayor may implement changes in the City's operating and financial practices and policies, and departmental leadership. The City does not expect that any of such changes will have any material adverse impact on the security for the Bonds, the Net Revenues or the ability of the City to pay the debt service on the Bonds.

## **PLAN OF FINANCING**

### **Projects**

Certain proceeds of the Series 2023A Bonds and of the Series 2023B Bonds are expected to be used to finance certain costs of the program of improvements and extensions to the Water System designated by the Commissioner of Water Management (the "Commissioner") including, but not limited to constructing and installing water mains; rehabilitating, upgrading, replacing, repairing, renovating, improving and extending facilities at the water purification plants; improving and extending facilities at any or all of the pumping stations; providing any and all necessary facilities, services and equipment to protect and enhance the safety, integrity and security of the Water System; and providing new equipment and technology and rehabilitating existing equipment necessary to continue to provide existing and future customers with the quality and quantity of water required and to meet future customer demand; and

Public-side LSLR (as defined herein and, collectively, the “Projects”). The City reserves the right to change any of the foregoing expected uses of proceeds and use proceeds of the Bonds to finance any of the other capital improvements in the Capital Improvement Program described in this Official Statement. See “WATER SYSTEM – Capital Improvement Program.”

**Refunding of Refunded Bonds**

Certain proceeds from the sale of the Series 2023B Bonds will be used to currently refund the Refunded Bonds (as defined below).

The maturity, interest rate, principal amount, redemption date, price and CUSIP for each maturity of the outstanding Second Lien Water Revenue Bonds to be refunded (the “Refunded Bonds”) are set forth in APPENDIX F – “REFUNDED BONDS.”

**SOURCES AND USES OF PROCEEDS**

The following table sets forth the estimated application of the proceeds of the Bonds as described under “PLAN OF FINANCING.”

<u>Source of Funds</u>	<u>Series 2023A Bonds</u>	<u>Series 2023B Bonds</u>	<u>Total</u>
Principal Amount of Bonds.....	\$254,210,000.00	\$322,205,000.00	\$576,415,000.00
Original Issue Premium .....	24,583,813.90	35,256,349.45	59,840,163.35
Total Sources of Funds.....	\$278,793,813.90	\$357,461,349.45	\$636,255,163.35
 <u>Use of Funds</u> 			
Project Costs .....	\$275,000,000.00		\$275,000,000.00
Excess Proceeds for Projects Costs.....		\$ 1,542,651.82	1,542,651.82
Deposit for Refunding.....		352,096,043.31	352,096,043.31
Costs of Issuance (including Underwriters’ discount and Bond Insurance Premium) .....	3,793,813.90	3,822,654.32	7,616,468.22
Total Uses of Funds .....	\$278,793,813.90	\$357,461,349.45	\$636,255,163.35

**DESCRIPTION OF THE BONDS**

**General**

The Bonds will be dated the date of their delivery and will bear interest from that date until paid, payable semiannually on each May 1 and November 1, commencing November 1, 2023. The Bonds will bear interest at the rates per year and mature in the principal amounts on November 1 in each year, as set forth on the inside cover of this Official Statement. Interest on the Bonds is computed on the basis of a 360-day year consisting of twelve 30-day months. The Bonds will be issued in denominations of \$5,000 or integral multiples thereof (“Authorized Denominations”). The Bonds are subject to redemption prior to maturity, as described below under the heading “– Redemption.”

Principal of and interest on the Bonds will be paid by the Trustee. If any payment on any Bonds is due on a day other than a Business Day, it will be made on the next Business Day, and no interest will accrue as a result.

The Bonds initially will be issued through a book-entry only system operated by The Depository Trust Company, New York, New York (“DTC”). Details of payments of the Bonds when in book-entry form and the book-entry only system are described below under the heading “– Book-Entry Only

System.” Except as described under the heading “– Book-Entry Only System” below, beneficial owners of the Bonds will not receive or have the right to receive physical delivery of Bonds and will not be or be considered to be the owners thereof. Accordingly, each beneficial owner must rely upon (i) the procedures of DTC and, if such beneficial owner is not a DTC “Participant,” the Participant who will act on behalf of such beneficial owner to receive notices and payments of principal of and interest on the Bonds, and to exercise voting rights and (ii) the records of DTC and, if such beneficial owner is not a Participant, such beneficial owner’s Participant, to evidence its beneficial ownership of the Bonds. So long as DTC or its nominee is the registered owner of the Bonds, references herein to Bondholders or owners of such Bonds mean DTC or its nominee and do not mean the beneficial owners of such Bonds.

## Redemption

*Mandatory Redemption from Sinking Fund Installments.* The Series 2023A Bonds maturing on November 1, 2048 are subject to mandatory redemption, in part, selected as provided in “Selection of Bonds for Redemption” below, from mandatory Sinking Fund Payments, on November 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed, on the dates and in the amounts set forth below:

<u>Year</u>	<u>Principal Amount</u>
2045	\$ 8,785,000
2046	\$ 9,245,000
2047	\$ 9,735,000
2048♦	\$10,245,000

♦Final Maturity

The Series 2023A Bonds maturing on November 1, 2053 are subject to mandatory redemption, in part, selected as provided in “Selection of Bonds for Redemption” below, from mandatory Sinking Fund Payments, on November 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

<u>Year</u>	<u>Principal Amount</u>
2049	\$10,780,000
2050	\$11,350,000
2051	\$11,945,000
2052	\$12,570,000
2053♦	\$13,230,000

♦Final Maturity

The Series 2023A Bonds maturing on November 1, 2058 are subject to mandatory redemption, in part, selected as provided in “Selection of Bonds for Redemption” below, from mandatory Sinking Fund Payments, on November 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

<u>Year</u>	<u>Principal Amount</u>
2054	\$2,400,000
2055	\$2,400,000
2056	\$2,400,000
2057	\$2,400,000
2058♦	\$2,400,000

♦Final Maturity



The Series 2023A Bonds maturing on November 1, 2062 are subject to mandatory redemption, in part, selected as provided in “Selection of Bonds for Redemption” below, from mandatory Sinking Fund Payments, on November 1 in each of the years and in the respective amounts set forth below, at a redemption price equal to the principal amount to be redeemed:

<u>Year</u>	<u>Principal Amount</u>
2054	\$11,525,000
2055	\$12,280,000
2056	\$13,075,000
2057	\$13,915,000
2058	\$14,800,000
2059	\$18,130,000
2060	\$19,130,000
2061	\$20,180,000
2062♦	\$21,290,000

♦Final Maturity

The Series 2023B Bonds are not subject to mandatory redemption.

If the City redeems Bonds of a Series and maturity identified above as subject to mandatory redemption, pursuant to optional redemption or purchases such Bonds and cancels the same, then an amount equal to the principal amount of the Bonds of such Series and maturity so redeemed or purchased shall be deducted from the mandatory redemption requirements as provided for such Bonds of such Series and maturity in such order as the Authorized Officer (as defined in the Ordinance) shall determine or, in the absence of such determination, shall be credited against the unsatisfied balance of the applicable Sinking Fund Payments in inverse order of their payment dates.

*Optional Redemption.* The Series 2023A Bonds maturing on and after November 1, 2033, are subject to redemption prior to maturity at the option of the City, on any date on or after May 1, 2033, as a whole or in part, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date, except for the Series 2023A Bond maturing on November 1, 2058. The Series 2023A Bond maturing on November 1 2058 is subject to redemption prior to maturity at the option of the City, on any date on or after May 1, 2032, as a whole or in part, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

The Series 2023B Bonds maturing on and after November 1, 2032, are subject to redemption prior to maturity at the option of the City, at any time on or after May 1, 2032, as a whole or in part, at any time, and if in part, in such order of maturity as the City shall determine and within any maturity by lot, in Authorized Denominations, at a price of par plus accrued interest to the redemption date.

**General Redemption Procedures**

*For a description of the giving of notices while the Bonds are in the Book-Entry system, see “–Book-Entry Only System” below.*

Unless waived by any owner of Bonds to be redeemed, notice of the call for any optional redemption shall be given by the Trustee on behalf of the City by mailing the redemption notice by first class mail at least 30 days and not more than 45 days prior to the date fixed for redemption to the registered owner of the Bond or Bonds to be redeemed at the address shown on the Bond Register or at

such other address as is furnished in writing by such registered owner to the Trustee. The failure to mail any such notice or any defect therein as to any Bond shall not affect the validity of the proceedings for the redemption of any other Bond to be redeemed. Any notice of redemption mailed as described above shall be conclusively presumed to have been given whether or not actually received by the addressee. Notice of the redemption of Bonds or any portion thereof to be redeemed will specify, at a minimum, (i) the series name and designation and certificate numbers of Bonds being redeemed, (ii) the CUSIP numbers of the Bonds being redeemed, (iii) the principal amount of Bonds being redeemed and the redeemed amount for each certificate (for partial calls), (iv) the redemption date, (v) the Redemption Price, (vi) the date of issuance of the Bonds being redeemed, (vii) the interest rate and Maturity Date of the Bonds being redeemed, (viii) the date of mailing of notices to registered owners and information services (if required), and (ix) the name of the employee of the Trustee who may be contacted with regard to such notice. With respect to an optional redemption of Bonds, such notice may state that said redemption is conditioned upon the receipt by the Trustee on or prior to the date fixed for redemption of moneys sufficient to pay the Redemption Price of the Bonds being redeemed. If such moneys are not so received, such redemption notice shall be of no force and effect, the City shall not redeem such Bonds and the Trustee will give notice, in the same manner in which the notice of redemption was given, that such moneys were not so received and that such Bonds will not be redeemed. Unless the notice of redemption shall be made conditional as provided above, on or prior to any redemption date for Bonds, the City will deposit with the Trustee an amount of money sufficient to pay the Redemption Price of all such Bonds or portions thereof which are to be redeemed on that date.

Notice of redemption having been given as described above, the Bonds, or portions thereof, to be redeemed will, on the redemption date (unless such redemption shall have been canceled as described above), become due and payable at the Redemption Price therein specified, and from and after such date (unless the City shall default in the payment of the Redemption Price) such Bonds, or portions thereof, shall cease to bear interest. Upon surrender of such Bonds for redemption in accordance with said notice, such Bonds will be paid by the Trustee at the Redemption Price. Installments of interest due on or prior to the redemption date shall be payable as provided in the Indenture for payment of interest. Upon surrender for any partial redemption of any Bond, there will be prepared for the registered owner a new Bond or Bonds of the same interest rate and maturity in the amount of the unpaid principal. If any Bond, or portion thereof, called for redemption shall not be so paid upon surrender thereof for redemption, the principal shall, until paid, bear interest from the redemption date at the rate borne by such Bond, or portion thereof, so called for redemption.

### **Selection of Bonds for Redemption**

In the event of the redemption of fewer than all the Bonds of the same Series, maturity and interest rate, the aggregate principal amount thereof to be redeemed shall be in an Authorized Denomination, and the Trustee shall assign to each Bond of such Series, maturity and interest rate a distinctive number for each minimum Authorized Denomination of such Bond and shall select by lot from the numbers so assigned as many numbers as, at such minimum Authorized Denomination for each number, equals the principal amount of such Bonds to be redeemed. The Bonds to be redeemed shall be those which were assigned numbers so selected; provided that only so much of the principal amount of each Bond shall be redeemed as shall equal such minimum Authorized Denomination for each number assigned to it and so selected. For purposes of any redemption of fewer than all of the outstanding Bonds of a single Series, maturity and interest rate, the particular Bonds or portions thereof to be redeemed shall be selected not more than 60 days prior to the redemption date by the Trustee. So long as DTC or its nominee is the registered owner of the Bonds, if fewer than all of the Bonds of any maturity and interest rate are called for redemption, the particular Bonds or portions of Bonds of such maturity and interest rate will be selected by lot by DTC in such manner as DTC may determine. See “– Book-Entry Only System.”

## **Bond Registration and Transfers**

For a description of the procedure to transfer ownership of a Bond while in the book-entry only system, see “– Book-Entry Only System” below. Subject to the limitations described below, the Bonds are transferable upon surrender thereof at the principal office of the Trustee, duly endorsed by, or accompanied by a written instrument or instruments of transfer in form satisfactory to the Trustee and duly executed by the Bondholder or such Bondholder’s authorized agent duly authorized in writing. Any Bond, upon surrender of such Bond at the principal office of the Trustee, may, at the option of the Bondholder, be exchanged for an equal aggregate principal amount of Bonds of like date and tenor of any Authorized Denomination. The Trustee may charge a fee sufficient to cover any tax, fee or other governmental charge in connection with any exchange or transfer of any Bond, except in the case of issuance of one or more Bonds for the unredeemed portion of a Bond surrendered for redemption in part.

The Trustee shall not be required to transfer or exchange any Bond during the period commencing on the Record Date next preceding any Interest Payment Date of such Bond and ending on such Interest Payment Date, or to transfer or exchange such Bond after the mailing of notice calling such Bond for redemption has been made as described above under “– General Redemption Procedures” or during the period of 15 days next preceding the giving of notice of redemption of Bonds of the same maturity and interest rate.

## **Book-Entry Only System**

*The following description of the procedures and recordkeeping with respect to the beneficial ownership interests in the Bonds, payment of interest and other payments on the Bonds to DTC Participants or Beneficial Owners (each as hereinafter defined), confirmation and transfer of beneficial ownership interests in the Bonds and other related transactions by and between DTC, DTC Participants and Beneficial Owners is based on certain information furnished by DTC. The information in this section concerning DTC and DTC’s book-entry system has been obtained from sources that the City believes to be reliable, but the City takes no responsibility for the accuracy thereof. Accordingly, neither the City nor the Underwriters of the Bonds makes any representation concerning these matters.*

*The information set forth below is subject to any change in or reinterpretation of the rules, regulations and procedures of DTC currently in effect, and the City expressly disclaims any responsibility to update this Official Statement to reflect any such changes. Investors wishing to use the facilities of DTC are advised to confirm the continued applicability of the rules, regulations and procedures of DTC. The City will have no responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Bonds held through the facilities of DTC or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.*

DTC will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of each Series of the Bonds, in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and

municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("*Direct Participants*") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("*DTCC*"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("*Indirect Participants*"). DTC has a rating of AA+ from S&P Global Ratings. The DTC Rules applicable to its Direct Participants and Indirect Participants (collectively, "*DTC Participants*") are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com).

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("*Beneficial Owner*") is in turn to be recorded on the DTC Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the DTC Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of DTC Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Bonds, except in the event that use of the book entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The DTC Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Ordinance and the Indenture or other documents related to the Bonds.

Redemption notices shall be sent to DTC. If less than all of the Bonds of a Series and maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in the Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under

its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the Record Date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the Record Date (identified in a listing attached to the Omnibus Proxy).

Payment of principal and interest on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the City or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by DTC Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such DTC Participant and not of DTC, the Underwriters, the Trustee or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of DTC Participants.

DTC may discontinue providing its services as securities depository with respect to the Bonds at any time by giving reasonable notice to the City or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, certificates for the Bonds will be printed and delivered.

The City may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, certificates for the Bonds will be printed and delivered to DTC.

Unless otherwise noted, the information contained in the preceding paragraphs concerning DTC and DTC's book-entry system has been extracted from information furnished by DTC. Neither the City nor the Underwriters makes any representation as to the completeness or the accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof.

SO LONG AS THE BONDS ARE REGISTERED IN THE NAME OF CEDE & CO., OR SUCH OTHER DTC NOMINEE, AS NOMINEE FOR DTC, THE CITY AND THE TRUSTEE MAY TREAT DTC (OR ITS NOMINEE) AS THE SOLE AND EXCLUSIVE REGISTERED OWNER OF THE BONDS FOR ALL PURPOSES UNDER THE ORDINANCE AND INDENTURE, INCLUDING FOR THE PURPOSES OF PAYMENT OF THE PRINCIPAL OF AND INTEREST ON THE BONDS, GIVING ANY NOTICE PERMITTED OR REQUIRED TO BE GIVEN TO REGISTERED OWNERS UNDER THE ORDINANCE AND INDENTURE, REGISTERING THE TRANSFER OF THE BONDS OR OTHER ACTION TO BE TAKEN BY REGISTERED OWNERS AND FOR ALL OTHER PURPOSES WHATSOEVER.

THE CITY AND THE TRUSTEE SHALL NOT HAVE ANY RESPONSIBILITY OR OBLIGATION TO ANY DTC PARTICIPANT, TO ANY PERSON CLAIMING A BENEFICIAL OWNERSHIP INTEREST IN THE BONDS UNDER OR THROUGH DTC OR TO ANY DTC PARTICIPANT OR ANY OTHER PERSON WHICH IS NOT SHOWN ON THE REGISTRATION BOOKS OF THE CITY (KEPT BY THE TRUSTEE) AS BEING A REGISTERED OWNER THAT DTC OR DTC PARTICIPANTS WILL DISTRIBUTE TO THE BENEFICIAL OWNERS OF THE BONDS: (i) PAYMENTS OF PRINCIPAL OR INTEREST ON THE BONDS; (ii) CONFIRMATIONS OF THEIR OWNERSHIP INTERESTS IN THE BONDS; OR (iii) OTHER NOTICES SENT TO DTC OR CEDE & CO., ITS PARTNERSHIP NOMINEE, AS THE REGISTERED OWNER OF THE

BONDS, OR THAT THEY WILL DO SO ON A TIMELY BASIS, OR THAT DTC OR DTC PARTICIPANTS WILL SERVE AND ACT IN THE MANNER DESCRIBED IN THIS OFFICIAL STATEMENT.

INTEREST AND PRINCIPAL WILL BE PAID BY THE CITY OR THE TRUSTEE TO DTC OR ITS NOMINEE. DISBURSEMENT OF SUCH PAYMENTS TO THE DIRECT PARTICIPANTS IS THE RESPONSIBILITY OF DTC, AND DISBURSEMENT OF SUCH PAYMENTS TO THE BENEFICIAL OWNERS IS THE RESPONSIBILITY OF THE DTC PARTICIPANTS.

**So long as Cede & Co., as nominee for DTC, is the registered owner of the Bonds, references in this Official Statement to the holders or registered owners of the Bonds (other than under the heading "TAX MATTERS" herein) shall mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners of the Bonds.**

NONE OF THE CITY, THE TRUSTEE OR THE UNDERWRITERS WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DTC, ANY DTC PARTICIPANT OR ANY BENEFICIAL OWNER WITH RESPECT TO: (i) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT; (ii) THE DELIVERY BY DTC OR ANY DTC PARTICIPANT OF ANY NOTICE TO ANY BENEFICIAL OWNER THAT IS PERMITTED OR REQUIRED TO BE GIVEN TO THE OWNERS OF THE BONDS UNDER THE TERMS OF THE ORDINANCE OR INDENTURE; (iii) THE SELECTION BY DTC OR ANY DTC PARTICIPANT OF ANY PERSON TO RECEIVE PAYMENT IN THE EVENT OF A PARTIAL REDEMPTION OF THE BONDS; (iv) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL OR INTEREST DUE WITH RESPECT TO THE BONDS; (v) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC OR CEDE & CO. OR OTHER DTC NOMINEE AS THE REGISTERED HOLDER OF THE BONDS; OR (vi) ANY OTHER MATTER.

Each person for whom a DTC Participant acquires an interest in the Bonds, as nominee, may desire to make arrangements with such DTC Participant to receive a credit balance in the records of such DTC Participant and may desire to make arrangements with such DTC Participant to have all notices of redemption or other communications of DTC, which may affect such person, to be forwarded in writing by such DTC Participant and to have notification made of all interest payments. NONE OF THE CITY, THE TRUSTEE OR THE UNDERWRITERS WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO SUCH DTC PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE BONDS.

When reference is made to any action which is required or permitted to be taken by the Beneficial Owners, such reference only relates to those permitted to act (by statute, regulation or otherwise) on behalf of such Beneficial Owners for such purposes. When notices are given, they will be sent by the Trustee to DTC only.

The City, in its sole discretion and without the consent of any other person, may terminate the services of DTC with respect to the Bonds if the City determines that DTC is unable to discharge its responsibilities with respect to the Bonds or that a continuation of the requirement that all of the Outstanding Bonds be registered in the registration books kept by the Trustee in the name of Cede & Co., as nominee of DTC, is not in the best interests of the Beneficial Owners. In the event that no substitute securities depository is found by the City or restricted registration is no longer in effect, Bond certificates will be delivered as described in the Ordinance and Indenture.

## **General Provisions of the Bonds When Not in Book-Entry Only System**

The owners of the Bonds have no right to the appointment or retention of a securities depository for the Bonds. If (i) the City determines, or (ii) the City receives notice that the securities depository has received notice from its Participants having interests in at least 50 percent in principal amount of the Bonds of a given series, that the securities depository or its successor is incapable of discharging its responsibilities as a securities depository, or that it is in the best interests of the beneficial owners that they obtain certificated Bonds, the City may (or, in the case of clause (ii) above, the City shall) cause the Trustee to authenticate and deliver Bond certificates for such series. The City shall have no obligation to make any determination described in this paragraph.

If, following a determination or event specified in the preceding paragraph, the City discontinues the maintenance of the Bonds in book-entry form with the then-current securities depository, the City will issue replacement Bonds to the replacement securities depository, if any, or, if no replacement securities depository is selected for the Bonds, directly to the Participants as shown on the records of the former securities depository or, to the extent requested by any Participant, to the Beneficial Owners of the Bonds shown on the records of such Participant. The City and the Trustee may conclusively rely upon (i) a certificate of the securities depository as to the identity of the participants in the book-entry system and (ii) a certificate of such participants as to the identity of, and the respective principal amounts of Bonds beneficially owned by, the Beneficial Owners. Replacement Bonds shall be in fully registered form and in Authorized Denominations, be payable as to interest on the Interest Payment Dates of the Bonds by check mailed to each owner at the address of such owner as it appears on the Bond Register or at the option of any Owner of not less than \$1,000,000 principal amount of Bonds, by wire transfer to any address in the United States of America on such Interest Payment Date to such owner as of such Record Date, if such owner provides the Trustee with written notice of such wire transfer address not later than the Record Date (which notice may provide that it will remain in effect with respect to subsequent Interest Payment Dates unless and until changed or revoked by subsequent notice). Principal and premium, if any, on the replacement Bonds, are payable only upon presentation and surrender of such replacement Bond or Bonds at the designated corporate trust office of the Trustee.

## **SECURITY FOR THE BONDS**

### **General**

The Bonds are limited obligations of the City having a claim for payment of principal, redemption premium, if any, and interest solely from the property conveyed by the City to the Trustee pursuant to the granting clauses of the Indenture (the "Trust Estate") and pledged to such payment under the Indenture. Neither the full faith and credit nor the taxing power of the City is pledged to the payment of the principal of, redemption premium, if any, or interest on the Bonds. The Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory provision or limitation as to indebtedness. The Bonds do not have a claim for payment from any taxes of the City. The Bonds are not secured by a lien on or security interest in the physical assets of the Water System, including the Projects.

As described herein, the Bonds are Second Lien Bonds and, together with (i) the Outstanding Second Lien Bonds issued pursuant to the Original Indenture and any Second Lien Parity Bonds issued pursuant to the Indenture from time to time in the future and (ii) amounts constituting Section 2.08 Obligations and Section 2.09 Obligations under the Indenture, are secured by a pledge of Net Revenues in the City's Water Fund except for amounts on deposit in the Senior Lien Rebate Accounts, the Subordinate Lien Obligations Account, the Commercial Paper Account and the Line of Credit Notes Account (and excluding monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be

issued). The Bonds are further secured by amounts on deposit from time to time in any Accounts established for the Bonds in the Indenture.

“Net Revenues” means that portion of the Gross Revenues remaining in any period after providing sufficient funds for Operation and Maintenance Costs.

### **Pledge of Net Revenues**

Under the Indenture, the Bonds are secured by, and payable from, the Trust Estate, including Net Revenues in the City’s Water Fund except for amounts on deposit in the Senior Lien Rebate Accounts, the Subordinate Lien Obligations Account, the Commercial Paper Account and the Line of Credit Notes Account (and excluding monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued), and amounts held by the Trustee under the terms of the Indenture. Pursuant to the Indenture, such Net Revenues are pledged to the payment of the principal of, premium, if any, and interest on all Second Lien Bonds (including the Bonds) without priority or distinction of one series of Second Lien Bonds over any other series of Second Lien Bonds. Second Lien Water Revenue Bonds issued prior to the issuance of the Bonds were issued pursuant to the terms of their respective authorizing ordinances and Supplemental Indentures under the Original Indenture. The Bonds and any future Second Lien Water Revenue Bonds will be issued pursuant to their respective authorizing ordinances and Supplemental Indentures, under the Master Indenture.

To the extent set forth in the Indenture, the Trust Estate and all moneys and securities held or set aside or to be held or set aside by the Trustee under the Indenture or any Supplemental Indenture have been pledged to secure the payment of the principal and Redemption Price of, and interest on, the Second Lien Bonds and the payment of all amounts constituting Section 2.08 Obligations and Section 2.09 Obligations, subject only to the provisions of the Indenture or any Supplemental Indenture requiring or permitting the payment, setting apart or appropriation of such moneys and securities for or to the purposes and on the terms, conditions, priorities and orders set forth in or provided under the Indenture or such Supplemental Indenture.

The claim to Net Revenues of Section 2.08 Obligations and Section 2.09 Obligations (except with respect to termination payments for Section 2.09 Obligations) is on parity to the claim of the Second Lien Bonds.

### **Flow of Funds**

The City maintains the Water Fund as a separate fund of the City to, among other things, carry out the provisions of the ordinances authorizing Senior Lien Bonds (but solely with respect to those amounts on deposit in the Senior Lien Rebates Account as described in this Official Statement), the ordinances authorizing Second Lien Bonds (as amended by the Master Indenture), Subordinate Lien Obligations, Commercial Paper Notes and Water System Line of Credit Notes (collectively, “Water Revenue Bonds”). Gross Revenues of the Water System are credited as they are deposited to the Water Fund, which is held by a depository bank which is currently not the depository for the City’s General Fund. The Water Fund constitutes a trust fund and has been and is irrevocably pledged to the owners of the Second Lien Bonds (but solely with respect to those amounts on deposit in the Second Lien Bonds Account as described in this Official Statement) and other Water Revenue Bonds (but solely with respect to funds on deposit in the respective applicable Account in the Water Fund). Moneys in the Water Fund are expended only as provided in the Indenture for (a) paying Operation and Maintenance Costs and (b) maintaining the Accounts in the Water Fund established by the Indenture and described below, including, without limitation, the Accounts securing the Bonds and other Second Lien Bonds, and all



other reserve funds or accounts which are established and maintained in the Master Indenture. Any funds available after these requirements have been satisfied or which are not necessary to satisfy these requirements may be used for any lawful purpose of the Water System.

Net Revenues are required to be transferred, without any further official action or direction, from the Water Fund to the following accounts in the following order of priority for the uses described below:

1. The *Senior Lien Rebate Accounts* are used at the direction of the City to make required rebate payments of arbitrage to the United States with respect to any Senior Lien Bonds and, to the extent not needed for such purpose, are then transferred to the Water Fund, provided that earnings on the investment of amounts on deposit in the Senior Lien Rebate Accounts shall not be Investment Earnings, shall not be considered Gross Revenues and shall be retained in the respective Senior Lien Rebate Accounts except to the extent no longer required for rebate purposes.

2. The *Second Lien Bonds Account* is used to pay the principal of and interest on the Bonds and any other Second Lien Bonds and to meet other payment obligations under the Indenture and any ordinance or supplemental indenture authorizing Second Lien Bonds, including deposits of monies and/or Qualified Reserve Account Credit Instruments to meet any series reserve account requirement. There shall be transferred from the Water Fund from Net Revenues to the Second Lien Bonds Account and to each Subaccount in the Second Lien Bonds Account such amounts on such dates as are required to be so transferred by the supplemental indenture authorizing the series of Second Lien Parity Bonds corresponding to such Subaccount, without priority of one Subaccount over any other Subaccount, Moneys on deposit in the Second Lien Bonds Account shall be applied without priority as to any particular series of Second Lien Bonds (other than moneys, instruments and securities or any Qualified Reserve Account Credit Instrument in any Debt Service Reserve established within the Second Lien Bonds Account for any particular series of Second Lien Bonds).

3. The *Subordinate Lien Obligations Account* is used to make debt service payments and other required deposits with respect to any Subordinate Lien Obligations. The City is obligated to make required debt service and other deposits to all subaccounts established in the Subordinate Lien Obligations Account on the Business Day immediately preceding each May 1 and November 1 in amounts specified in a certificate of its Chief Financial Officer reflecting the amount required by any ordinance authorizing the issuance of Subordinate Lien Obligations. Moneys on deposit in the Subordinate Lien Obligations Account shall be applied without priority to any subaccounts established in the Subordinate Lien Obligations Account.

4. The *Commercial Paper Account* is used to make debt service payments and other required deposits with respect to any Commercial Paper Notes authorized and issued under any ordinances or related indentures. The moneys on deposit in the Commercial Paper Account are required to be transferred by the Chief Financial Officer on the date so deposited to the appropriate paying agents or trustees for the related Commercial Paper Notes for the purpose of paying such amounts as may be required to be paid by the ordinances and related supplemental indentures authorizing such Commercial Paper Notes.

5. The *Line of Credit Notes Account* is used to make debt service payments and other required deposits with respect to any Water System Line of Credit Notes authorized and issued under any ordinances or related Water System Line of Credit Agreements. The moneys on deposit in the Line of Credit Notes Account are required to be transferred by the Chief Financial Officer on the date so deposited to the appropriate owners of or paying agents or trustees for the

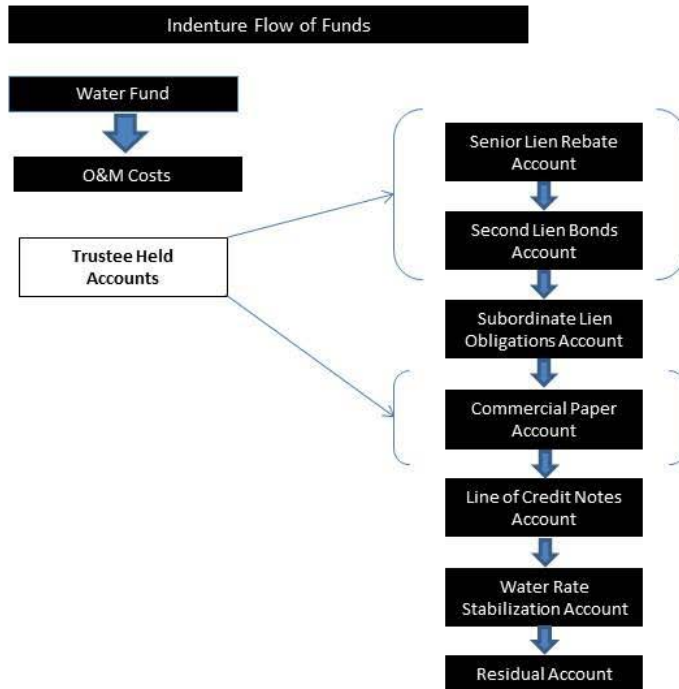
related Water System Line of Credit Notes for the purpose of paying such amounts as may be required to be paid by the ordinances and related Water System Line of Credit Agreements authorizing Water System Line of Credit Notes.

6. The *Water Rate Stabilization Account* is used at the City's discretion, in any year, to pay any expenses of or obligations of the Water System, including Operation and Maintenance Costs, deposits when due in the Second Lien Bonds Account, deposits when due in the Subordinate Lien Obligations Account (but only if and to the extent no amounts are required to be deposited in the Second Lien Bonds Account), deposits when due in the Commercial Paper Account (but only if and to the extent no amounts are required to be deposited in the Second Lien Bonds Account or the Subordinate Lien Obligations Account), deposits when due in the Line of Credit Notes Account (but only if and to the extent no amounts are required to be deposited in the Second Lien Bond Accounts, in the Subordinate Lien Obligations Account or in the Commercial Paper Account), any costs of repairs, replacements, renewals, improvements, equipment or extensions to the Water System or any other cost or expense relating to the Water System or the financing or refinancing of the Water System. On the Business Day immediately preceding each November 2 there shall be transferred from the Water Fund from Net Revenues and deposited to the credit of the Water Rate Stabilization Account such amount as shall be required for the balance in the Water Rate Stabilization Account to equal at least ninety (90) Days' Cash On Hand. For purposes of complying with the Rate Covenant and other covenants of the Indenture described in "INTRODUCTION – Rate Covenant" (above) and APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE" under the caption "– Additional Second Lien Bonds," the Chief Financial Officer may allocate from the Water Rate Stabilization Account to Net Revenues Available for Bonds, the amount determined by the Chief Financial Officer to be allocated for the applicable Fiscal Year.

7. The *Residual Account* may be used for paying any expenses or obligations of the Water System, including, without limitation, any Operation and Maintenance Costs, making deposits when due in the Second Lien Bonds Account, making deposits when due in the Subordinate Lien Obligations Account (but only if and to the extent no amounts are required to be deposited in the Second Lien Bonds Account), making deposits when due in the Commercial Paper Account (but only if and to the extent no amounts are required to be deposited in the Second Lien Bond Accounts or the Subordinate Lien Obligations Account), making deposits when due in the Line of Credit Notes Account (but only if and to the extent no amounts are required to be deposited in the Second Lien Bond Accounts, in the Subordinate Lien Obligations Account or in the Commercial Paper Account), any cost of repairs, replacements, renewals, improvements, equipment or extensions to the Water System or any other cost or expense relating to the Water System or the financing or refinancing of the Water System. For purposes of complying with the Rate Covenant and other covenants of the Indenture described in "INTRODUCTION – Rate Covenant" (above) and APPENDIX B – "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE" under the caption "– Additional Second Lien Bonds," the Chief Financial Officer may allocate from the Residual Account to Net Revenues Available for Bonds, the amount determined by the Chief Financial Officer to be allocated for the applicable Fiscal Year.

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The following chart shows the priority of the flow of funds from the Water Fund into each of the accounts established pursuant to the Master Indenture as described in greater detail above.



To provide for debt service on the Bonds, the City, on or before each May 1 and November 1 (each a “Deposit Date”), commencing November 1, 2023, is required to deposit into the 2023 Second Lien Bonds Subaccount established within the Second Lien Bonds Account pursuant to the Indenture, from amounts on deposit in the Second Lien Bonds Account (other than monies, instruments or securities or any “Qualified Resource Account Credit Instrument” on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued), an amount equal to the aggregate of the following amounts (such amounts are calculated by the Trustee and transferred by the City to the Trustee in accordance with the Indenture on or before each such Deposit Date):

(a) for deposit into the Principal and Interest Account of the 2023 Second Lien Bonds Subaccount (the “Principal and Interest Account”), an amount equal to the Principal and Interest Account Requirement; and

(b) for deposit into the Program Fee Account of the 2023 Second Lien Bonds Subaccount, the amount estimated by the City to be required as of the close of business on the related Deposit Date to pay all Program Fees payable from amounts in the Program Fee Account during the semi-annual period commencing on such related Deposit Date and, in the case of the initial Deposit Date, any fees payable from the date of issuance to, but not including, such initial Deposit Date.

“Principal and Interest Account Requirement,” as used in the preceding sentence, means an amount, calculated as of each Deposit Date, equal to the total principal installments and interest due on the Bonds on such Deposit Date. Except as otherwise provided in the Indenture, moneys on deposit in the Principal and Interest Account will be held by the Trustee for the sole and exclusive benefit of the Bonds

and used for the purpose of paying the principal of and interest on the Bonds when due. See APPENDIX B – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Application of Bond Proceeds – Deposits into 2023 Second Lien Bond Subaccount and Accounts Therein.”

### **Second Lien Parity Bonds**

As long as there are any Outstanding Second Lien Bonds, the City may issue Second Lien Parity Bonds for any lawful purpose of the Water System, including, to refund Outstanding Second Lien Bonds, Subordinate Lien Obligations or obligations payable from revenues of the Water System on a basis subordinate to the Second Lien Bonds and Subordinate Lien Obligations. The issuance of Second Lien Parity Bonds is subject to certain conditions, including compliance with debt service coverage covenants, which are summarized in APPENDIX B – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Additional Second Lien Bonds.”

For additional descriptions of the restrictions on the issuance of additional Water Revenue Bonds, see APPENDIX B – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE.”

### **Subordinate Lien Obligations and Other Subordinate Obligations**

The Indenture does not restrict the City’s ability to issue obligations payable on a basis subordinate to the Bonds, including Subordinate Lien Obligations, Commercial Paper Notes and Water System Line of Credit Notes. As of April 1, 2023, there were \$519.6 million outstanding aggregate principal amount of Subordinate Lien Obligations in the form of loans from the Illinois Environmental Protection Agency (“IEPA”). There are no amounts currently outstanding under any Water System Line of Credit Notes nor are there any Commercial Paper Notes currently outstanding.

### **Deficiencies and Excesses**

In the event of a deficiency in any Fiscal Year in any Senior Lien Rebate Account, the Second Lien Bonds Account, the Subordinate Lien Obligations Account, the Commercial Paper Account, the Line of Credit Notes Account, or the Water Rate Stabilization Account, the amount of such deficiency shall be transferred from the Residual Account and deposited into such Account or Subaccount. Whenever the balance in any subaccount of any Senior Lien Rebate Account exceeds the amount required to be on deposit in such account, the excess may be transferred to the Water Fund, provided that no such transfers shall be made when any debt service payments on outstanding obligations of the City (including the Bonds) that are payable by their terms from the revenues of the Water System are past due. Any funds that remain in the Water Fund at the end of any Fiscal Year shall be retained in the Residual Account of the Water Fund and shall be available for appropriation for any proper purpose of the Water System.

### **Investment of Funds**

Money held in the funds, accounts and subaccounts established under the Thirteenth Supplemental Indenture, including moneys held for payment of Bonds not presented for payment, shall be invested and reinvested in Permitted Investments; provided however that moneys in the Principal and Interest Account representing principal of or interest on the Bonds shall only be invested in Government Obligations scheduled to mature on the earlier of (i) (A) 30 days from the date of investment for amounts representing principal of the Bonds, or (B) six months from the date of investment for amounts representing interest payable on the Bonds, or (ii) the date upon which such moneys will be required to be used in accordance with the Thirteenth Supplemental Indenture. The interest earned on any investment of money held under the Thirteenth Supplemental Indenture, any profit realized from such investment and

any loss resulting from such investment shall be credited or charged to the fund, account, or subaccount for which such investment was made.

## **BOND INSURANCE**

### **Bond Insurance Policy**

Concurrently with the issuance of the Insured Bonds, Assured Guaranty Municipal Corp. (“AGM”) will issue its Municipal Bond Insurance Policy for the Insured Bonds (the “Policy”). The Policy guarantees the scheduled payment of principal of and interest on the Insured Bonds when due as set forth in the form of the Policy included as APPENDIX G to this Official Statement.

The Policy is not covered by any insurance security or guaranty fund established under New York, California, Connecticut or Florida insurance law.

### **Assured Guaranty Municipal Corp**

AGM is a New York domiciled financial guaranty insurance company and an indirect subsidiary of Assured Guaranty Ltd. (“AGL”), a Bermuda-based holding company whose shares are publicly traded and are listed on the New York Stock Exchange under the symbol “AGO”. AGL, through its operating subsidiaries, provides credit enhancement products to the U.S. and international public finance (including infrastructure) and structured finance markets and asset management services. Neither AGL nor any of its shareholders or affiliates, other than AGM, is obligated to pay any debts of AGM or any claims under any insurance policy issued by AGM.

AGM’s financial strength is rated “AA” (stable outlook) by S&P Global Ratings, a business unit of Standard & Poor’s Financial Services LLC (“S&P”), “AA+” (stable outlook) by Kroll Bond Rating Agency, Inc. (“KBRA”) and “A1” (stable outlook) by Moody’s Investors Service, Inc. (“Moody’s”). Each rating of AGM should be evaluated independently. An explanation of the significance of the above ratings may be obtained from the applicable rating agency. The above ratings are not recommendations to buy, sell or hold any security, and such ratings are subject to revision or withdrawal at any time by the rating agencies, including withdrawal initiated at the request of AGM in its sole discretion. In addition, the rating agencies may at any time change AGM’s long-term rating outlooks or place such ratings on a watch list for possible downgrade in the near term. Any downward revision or withdrawal of any of the above ratings, the assignment of a negative outlook to such ratings or the placement of such ratings on a negative watch list may have an adverse effect on the market price of any security guaranteed by AGM. AGM only guarantees scheduled principal and scheduled interest payments payable by the issuer of bonds insured by AGM on the date(s) when such amounts were initially scheduled to become due and payable (subject to and in accordance with the terms of the relevant insurance policy), and does not guarantee the market price or liquidity of the securities it insures, nor does it guarantee that the ratings on such securities will not be revised or withdrawn.

#### *Current Financial Strength Ratings*

On October 21, 2022, KBRA announced it had affirmed AGM’s insurance financial strength rating of “AA+” (stable outlook). AGM can give no assurance as to any further ratings action that KBRA may take.

On July 8, 2022, S&P announced it had affirmed AGM’s financial strength rating of “AA” (stable outlook). AGM can give no assurance as to any further ratings action that S&P may take.

On March 18, 2022, Moody's announced it had upgraded AGM's insurance financial strength rating to "A1" (stable outlook) from "A2" (stable outlook). AGM can give no assurance as to any further ratings action that Moody's may take.

For more information regarding AGM's financial strength ratings and the risks relating thereto, see AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

#### *Capitalization of AGM*

At December 31, 2022:

- The policyholders' surplus of AGM was approximately \$2,747 million.
- The contingency reserve of AGM was approximately \$855 million.
- The net unearned premium reserves and net deferred ceding commission income of AGM and its subsidiaries (as described below) were approximately \$2,134 million. Such amount includes (i) 100% of the net unearned premium reserve and net deferred ceding commission income of AGM, and (ii) the net unearned premium reserves and net deferred ceding commissions of AGM's wholly owned subsidiary Assured Guaranty UK Limited ("AGUK") and its 99.9999% owned subsidiary Assured Guaranty (Europe) SA ("AGE").

The policyholders' surplus of AGM and the contingency reserves, net unearned premium reserves and net deferred ceding commission income of AGM were determined in accordance with statutory accounting principles. The net unearned premium reserves and net deferred ceding commissions of AGUK and AGE were determined in accordance with accounting principles generally accepted in the United States of America.

#### *Incorporation of Certain Documents by Reference*

Portions of AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 filed with the Securities and Exchange Commission (the "SEC") on March 1, 2023 that relate to AGM are incorporated by reference into this Official Statement and shall be deemed to be a part hereof.

All information relating to AGM included in, or as exhibits to, documents filed by AGL with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, excluding Current Reports or portions thereof "furnished" under Item 2.02 or Item 7.01 of Form 8-K, after the filing of the last document referred to above and before the termination of the offering of the Bonds shall be deemed incorporated by reference into this Official Statement and to be a part hereof from the respective dates of filing such documents. Copies of materials incorporated by reference are available over the internet at the SEC's website at <http://www.sec.gov>, at AGL's website at <http://www.assuredguaranty.com>, or will be provided upon request to Assured Guaranty Municipal Corp.: 1633 Broadway, New York, New York 10019, Attention: Communications Department (telephone (212) 974-0100). Except for the information referred to above, no information available on or through AGL's website shall be deemed to be part of or incorporated in this Official Statement.

Any information regarding AGM included herein under the caption "BOND INSURANCE – Assured Guaranty Municipal Corp." or included in a document incorporated by reference herein (collectively, the "AGM Information") shall be modified or superseded to the extent that any subsequently included AGM Information (either directly or through incorporation by reference) modifies

or supersedes such previously included AGM Information. Any AGM Information so modified or superseded shall not constitute a part of this Official Statement, except as so modified or superseded.

*Miscellaneous Matters*

AGM makes no representation regarding the Bonds or the advisability of investing in the Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading “BOND INSURANCE.”

**OUTSTANDING DEBT AND ANNUAL DEBT SERVICE**

**Senior Lien and Second Lien Obligations**

There are no outstanding Senior Lien Bonds. The City has covenanted in the Indenture not to issue any additional Senior Lien Bonds. The outstanding indebtedness of the Water System as of April 1, 2023, consists of, prior to the issuance of the Bonds, \$1.7 billion aggregate principal amount of Second Lien Bonds. The City Council has authorized the issuance of \$700,000,000 Second Lien Bonds, including the Bonds. The WIFIA Bond has also been authorized to be issued by the City Council and the City expects to issue it in the amount of \$336,000,000 later in May 2023. The WIFIA Bond will be a Second Lien Bond on parity with the Bonds and any other Second Lien Bonds. See “WATER SYSTEM – WIFIA Loan.” The Subordinate Lien Obligations and other subordinate obligations outstanding are described under the caption “– Subordinate Obligations” below. The debt service on the Second Lien Bonds, including debt service after the issuance of the Bonds, is as shown in the following table:

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**SECOND LIEN BONDS OUTSTANDING ANNUAL DEBT SERVICE<sup>(1)</sup>**

Fiscal Year Ended December 31	Outstanding Second Lien Bonds <sup>(2)</sup>	Refunded Debt Service	Total Second Lien Debt Service Requirements	Series 2023A Bonds		Series 2023B Bonds		Total	Total Debt Service <sup>(3)</sup>
				Principal	Interest	Principal	Interest		
2023	178,062,794	8,460,900	169,601,894	-	6,534,489	7,500,000	7,549,391	21,583,880	191,185,774
2024	178,308,857	30,706,800	147,602,057	-	13,676,838	20,000,000	15,426,050	49,102,888	196,704,945
2025	182,715,837	32,857,550	149,858,287	-	13,676,838	10,000,000	14,426,050	38,102,888	187,961,175
2026	183,281,662	32,856,300	150,425,362	-	13,676,838	-	13,926,050	27,602,888	178,028,250
2027	183,310,979	32,858,550	150,452,429	-	13,676,838	-	13,926,050	27,602,888	178,055,317
2028	170,569,997	32,857,050	137,712,947	-	13,676,838	2,500,000	13,926,050	30,102,888	167,815,835
2029	170,093,092	32,854,800	137,238,292	-	13,676,838	5,000,000	13,801,050	32,477,888	169,716,180
2030	165,660,813	32,854,013	132,806,801	-	13,676,838	7,500,000	13,551,050	34,727,888	167,534,688
2031	131,293,113	32,856,163	98,436,951	-	13,676,838	40,000,000	13,176,050	66,852,888	165,289,838
2032	120,023,632	25,608,450	94,415,182	-	13,676,838	40,000,000	11,176,050	64,852,888	159,268,070
2033	119,580,220	25,608,700	93,971,520	-	13,676,838	15,000,000	9,176,050	37,852,888	131,824,408
2034	119,121,348	25,608,500	93,512,848	-	13,676,838	20,000,000	8,426,050	42,102,888	135,615,736
2035	118,639,108	25,606,100	93,033,008	-	13,676,838	25,000,000	7,426,050	46,102,888	139,135,896
2036	118,139,653	25,605,500	92,534,153	-	13,676,838	30,000,000	6,176,050	49,852,888	142,387,041
2037	110,256,709	5,715,500	104,541,209	-	13,676,838	20,000,000	4,676,050	38,352,888	142,894,097
2038	109,605,825	26,400,500	83,205,325	-	13,676,838	20,000,000	3,676,050	37,352,888	120,558,213
2039	93,341,126	26,401,250	66,939,876	-	13,676,838	28,785,000	2,676,050	45,137,888	112,077,764
2040	92,450,897	26,405,250	66,045,647	-	13,676,838	30,920,000	1,236,800	45,833,638	111,879,285
2041	50,204,750	26,404,750	23,800,000	-	13,676,838	-	-	13,676,838	37,476,838
2042	50,203,250	26,402,250	23,801,000	-	13,676,838	-	-	13,676,838	37,477,838
2043	23,803,000	-	23,803,000	-	13,676,838	-	-	13,676,838	37,479,838
2044	23,803,500	-	23,803,500	-	13,676,838	-	-	13,676,838	37,480,338
2045	-	-	-	8,785,000	13,676,838	-	-	22,461,838	22,461,838
2046	-	-	-	9,245,000	13,215,625	-	-	22,460,625	22,460,625
2047	-	-	-	9,735,000	12,730,263	-	-	22,465,263	22,465,263
2048	-	-	-	10,245,000	12,219,175	-	-	22,464,175	22,464,175
2049	-	-	-	10,780,000	11,681,313	-	-	22,461,313	22,461,313
2050	-	-	-	11,350,000	11,115,363	-	-	22,465,363	22,465,363
2051	-	-	-	11,945,000	10,519,488	-	-	22,464,488	22,464,488
2052	-	-	-	12,570,000	9,892,375	-	-	22,462,375	22,462,375
2053	-	-	-	13,230,000	9,232,450	-	-	22,462,450	22,462,450
2054	-	-	-	13,925,000	8,537,875	-	-	22,462,875	22,462,875
2055	-	-	-	14,680,000	7,784,000	-	-	22,464,000	22,464,000
2056	-	-	-	15,475,000	6,988,600	-	-	22,463,600	22,463,600
2057	-	-	-	16,315,000	6,149,475	-	-	22,464,475	22,464,475
2058	-	-	-	17,200,000	5,264,150	-	-	22,464,150	22,464,150
2059	-	-	-	18,130,000	4,330,150	-	-	22,460,150	22,460,150
2060	-	-	-	19,130,000	3,333,000	-	-	22,463,000	22,463,000
2061	-	-	-	20,180,000	2,280,850	-	-	22,460,850	22,460,850
2062	-	-	-	21,290,000	1,170,950	-	-	22,460,950	22,460,950
<b>Total</b>	<b>\$2,692,470,159</b>	<b>\$534,928,875</b>	<b>\$2,157,541,287</b>	<b>\$254,210,000</b>	<b>\$443,870,014</b>	<b>\$322,205,000</b>	<b>\$174,352,991</b>	<b>\$1,194,638,005</b>	<b>\$3,352,179,292</b>

- (1) Principal and interest (including the amount of interest that has accreted on capital appreciation bonds) for each year includes amounts payable on the City's water revenue bonds on May 1 and November 1 of that year. All of the City's outstanding water revenue bonds bear interest at a fixed rate. Totals may not add due to rounding.
- (2) Interest for each year includes the full amount of interest payable on the City's Series 2010B Second Lien Bonds without adjustment for certain direct payment subsidies expected by the City to be received from the U.S. Treasury.
- (3) Subordinate Lien Obligations are not included in this outstanding debt service table.



## Subordinate Obligations

The City has entered into loan agreements with the IEPA as shown in the following table to fund Water System projects. Each loan constitutes a Subordinate Lien Obligation. It is anticipated that the City will enter into additional IEPA loans and may enter into other additional Subordinate Lien Obligations in the future. Subordinate Lien Obligations, including the IEPA loans, have a claim to payments from amounts in the Water Fund that is subordinate to the claim of the Bonds. As of April 1, 2023, there were \$519.6 million outstanding aggregate principal amount of Subordinate Lien Obligations in the form of loans from the IEPA.

### SUBORDINATE LIEN OBLIGATIONS OUTSTANDING

<u>IEPA Loans in Repayment</u>	<u>Final Maturity Date</u>	<u>Interest Rate (%)</u>	<u>Amount of Loan Outstanding<sup>(1)</sup></u>
L17-2054	11/1/2025	2.57	502,718
L17-3767	9/9/2037	1.995	34,233,671
L17-3769	11/1/2032	1.25	819,714
L17-3770	12/2/2031	0	4,103,151
L17-4564	12/21/2031	1.25	2,885,578
L17-4686	11/1/2032	1.25	815,998
L17-4687	12/27/2032	1.25	3,308,528
L17-4864	3/21/2034	2.295	3,963,473
L17-4865	7/16/2034	1.93	24,563,932
L17-5025	10/16/2034	1.93	9,737,151
L17-5199	6/17/2035	1.995	31,590,844
L17-5229	9/2/2038	1.86	23,676,196
L17-5232	1/31/2036	2.21	44,480,737
L17-5281	4/14/2035	1.995	10,309,376
L17-5319	1/4/2041	1.64	34,744,970
L17-5330	11/21/2042	1.76	55,860,802
L17-5331	7/17/2037	1.86	63,045,842
L17-5332	6/1/2036	1.86	14,464,261
L17-5361	8/13/2039	1.64	4,630,918
L17-5384	7/17/2037	1.64	17,438,482
L17-5417	6/19/2038	1.86	32,875,535
L17-5480	5/25/2039	1.76	91,624,271
L17-5481	10/9/2039	1.76	9,951,292
Total Outstanding Principal Balance			<u>\$519,627,439</u>

Source: City of Chicago, Department of Water Management.

<sup>(1)</sup> The outstanding principal amounts are as of April 1, 2023.

The City has also signed initial loan agreements pertaining to an additional \$138.9 million of IEPA loans. Disbursements for these loans are ongoing and the final amounts of the loans may change based on project needs. The interest rate and expected maturity dates are shown as set out in the respective initial loan agreements but may change when the final loan agreements are signed following the final disbursement of each loan.

**IEPA WATER REVENUE FUND LOANS WITH INITIAL LOAN AGREEMENTS**

**IEPA WATER REVENUE FUND LOANS WITH INITIAL LOAN AGREEMENTS**

<b>IEPA Loans Still Disbursing</b>	<b>Expected Maturity</b>	<b>Expected Interest Rate (%)</b>	<b>Full Amount of Loan</b>
L17-5482	2/27/2043	2.00	105,000,000
L17-5843	8/17/2043	0.91	4,000,000
L17-3766	9/22/2043	1.11	23,148,220
L17-5483	10/16/2043	1.11	<u>6,711,132</u>
Total Pending Loan Amount			<u>\$138,859,352</u>

Source: City of Chicago, Department of Water Management.

**Commercial Paper Notes and Water System Line of Credit Notes**

Ordinances of the City authorizing the issuance of water revenue bonds also authorize the issuance from time to time of Commercial Paper Notes and Water System Line of Credit Notes for the purposes of financing or refinancing capital improvements to the Water System or providing funds to meet the cash flow needs of the Water System, among others. The maximum aggregate principal amount of all Commercial Paper Notes and Water System Line of Credit Notes outstanding at any one time may not exceed \$200,000,000 without further authorization from the City Council. There are no Commercial Paper Notes outstanding (nor are there any letters of credit or other instruments in effect and available to support any Commercial Paper Notes), nor are there any Line of Credit Notes outstanding. Should either of these obligations be issued in the future, the claim of any Commercial Paper Notes or Water System Line of Credit Notes for payment from moneys in the Water Fund will be subordinate to the claim of the Bonds.

All interest rate swaps associated with the City’s Second Lien Bonds have been terminated, however the City reserves its rights to enter into interest rate swaps in connection with Second Lien Bonds in the future.

**DEPARTMENT OF WATER MANAGEMENT**

The City’s Department of Water Management (the “Department”) is an executive department of the City with responsibility for the operation, maintenance, repair, improvement and extension of the Water System and the Sewer System. Separate water and sewer funds are maintained to comply with legal requirements.

The budgeted employment level of the Department for 2023 for Water System employees was 1377, and Sewer System employees was 432 (this represents the total number of employees on the City’s payroll and excludes leaves of absence and duty disability). The Department includes employees with professional qualifications in the fields of engineering, law, science, construction management, public sector management and financial management, as well as skilled technical personnel. In total, the Department has 78 college-degreed engineers, 16 staff with advanced degrees, 27 college-degreed chemists and 6 college-degreed microbiologists. Of these, 20 are licensed Water Operators and 13 are licensed Professional Engineers. Substantially all of the Department’s employees are covered by collective bargaining agreements, whose terms expired June 30, 2022; the agreements remain in effect while negotiations continue on successor agreements. The 2023 Water Fund budget anticipates the impact of future funding increases, which includes wage increases and anticipated wage increases with respect to such successor collective bargaining agreements. In 2023, the City undertook a salary compression analysis (the “Salary Study”) as a managerial retention initiative. The Salary Study

recommended the adjustment of certain non-represented managerial salaries, including Department non-represented managerial employees, to more accurately reflect executive functions, levels of supervision, and responsibilities. The resolution authorizing the adjustment of managerial salaries according to the Salary Study was passed by the City Council on April 19, 2023.

The Department is building efficiencies and cost savings for the City by coordinating the activities of the Water System with the work of other City agencies, the Office of the Mayor, other City departments and private utility providers. For example, the Department and other City agencies participate in regularly scheduled coordination meetings to review critical infrastructure requirements, share in the costs of administration, set program deadlines, work with tax-increment financing capital planning and ensure that the Chicago Department of Transportation manages rights of way scheduling and construction. The Department has increased its use of mapping and technology. Some of the key benefits from these programs include but are not limited to: (i) the ability to update existing systems like 311 from the field; (ii) the ease of integrating the Geographic Information System with other systems such as the Department's work order management system, metering system, and scheduling software; (iii) the ability to coordinate with field crews and off-site contractors directly; and (iv) having live data presented in a visual format that provides a full operational picture and true status updates. The Department pushes information out into the field using mobile devices so that the construction and maintenance crews can quickly and easily follow the plan and report back live information and progress of their work.

### **Organization and Staffing**

The chief administrator of the Department is the Commissioner, who is appointed by the Mayor with the approval of the City Council. On May 25, 2021, Andrea R.H. Cheng was appointed as Commissioner of the Department. Under the direction of the Commissioner, the Department is organized into five bureaus and the Commissioner's office as follows:

Commissioner's Office: The office is responsible for the oversight and management of general and project-specific initiatives for the other bureaus. This office also includes security and safety.

Administrative Support: This bureau is responsible for the collection and dissemination of all financial information, procurement and contract administration, personnel, labor relations, information technology and payroll.

Operations and Distribution: This bureau is responsible for the maintenance, repair and installation of water and sewer mains and appurtenances, including valves, fire hydrants, manholes, catch basins and valve basins.

Water Supply: This bureau is responsible for the treatment, purification, pumping and monitoring the quality and purity of the water supply.

Engineering Services: This bureau is responsible for providing engineering and inspection support for the planning, design, expansion, rehabilitation, operating, monitoring and inspection of the Water and Sewer Systems.

Meter Service: This bureau is responsible for water meter installation, reading and repair.

The City maintains a self-insurance program, including casualty coverage, general liability coverage and workers' compensation for the Department. The City also maintains replacement-cost property insurance that covers the major facilities of the Water System.

## **WATER SYSTEM**

### **Description of Facilities**

*Treatment Plants.* The Department operates the world's largest conventional water treatment facility, the James W. Jardine Water Purification Plant (the "Jardine Plant"), with multiple engineering redundancies and excess treatment capacity. The Eugene Sawyer Purification Plant (previously named South Water Purification Plant, the "Sawyer Plant") is the 8th largest conventional water treatment facility in the world and will be 2nd largest after filtration upgrades are completed in 2030. The Sawyer Plant has a rated capacity of 720 million gallons per day ("MGD") and serves the City south of 39<sup>th</sup> Street and the City's south and southwest suburban customers. This plant was placed into service in 1947 with a rated capacity of 480 MGD. In 1966, this plant was expanded by 50% which increased its capacity by 240 MGD to its current rated capacity. The Jardine Plant is the largest fresh water purification plant in the world with a rated capacity of 1.44 billion gallons per day ("BGD"). It has been in operation since 1964 serving the City north of 39<sup>th</sup> Street, the DuPage Water Commission, and the City's other western and northern suburban customers. The two plants aggregate a continuous service capacity of 2.16 BGD and the systems meet or exceed EPA standards on numerous quality and regulatory metrics.

These plants are supplied from four water intakes, two of which are water intake cribs located in Lake Michigan two to four miles from shore and two of which are shore intakes (one at each plant).

*Pumping Stations; Water Supply Tunnels; Water Distribution.* Water is transported throughout the Water System by 64 miles of water supply tunnels. These tunnels are located 40 to 100 feet below the surface of the ground and range in size from six feet to 20 feet in diameter. Water is raised from the tunnels by the pumps in the 12 pumping stations and delivered to customers through a water distribution system of approximately 4,300 miles of water mains (ranging in size from four to 60 inches in diameter), approximately 48,000 fire hydrants and approximately 49,000 valves.

### **Capital Improvement Program**

The City, through the Department, continually improves and rehabilitates the Water System. To provide for future additions to the Water System, replacement of facilities and rehabilitation of existing facilities, the Department most recently prepared an ongoing projected Capital Improvement Program covering a five-year period from 2022 to 2026 (the "Capital Improvement Program").

The Capital Improvement Program includes a series of annual benchmarks that the Department intends to achieve in order to implement the entire Capital Improvement Program. The Capital Improvement Program addresses the renewal, replacement and modification of the Water System's infrastructure and focuses on four major areas: (i) water main replacement, (ii) meter installation, (iii) rehabilitation, electrification and modification of pumping stations and rehabilitation of intakes, and (iv) rehabilitation and upgrading of the Water System's two purification plants. The Department plans to replace 25 miles of water mains in each of the years 2023 through 2026. As part of new state legislation described below that requires lead service line replacement whenever a lead service line is damaged or disturbed, the Department had to end the stand-alone meter installation program at the end of 2022. Going forward, meter installation will be included as part of the lead service line replacement programs associated with water main replacement, sewer main replacement, and the Leaks and Breaks LSLR program described below.

With respect to the electrification of pumping stations, only two completely steam-operated plants remain, Mayfair Pumping Station and Western Avenue Pumping Station. Design for the electrification of the Western Avenue Pumping Station is anticipated to start in the third quarter of 2023.

The design for the Mayfair Pumping Station will start once the construction for Western Avenue is underway. Most recently, the Department completed the electrification of the Springfield pumping station and the design of the conversion of Central Park pumping station from steam to electric power. The Central Avenue Pumping Station is partially steam and will be fully electrified once this construction project is completed in 2025.

The Projects anticipated to be funded from proceeds of the Series 2023A Bonds and of the Series 2023B Bonds relate to the ongoing implementation of the Capital Improvement Program, as well as Public-side LSLR alongside water main replacement. See “Lead Service Line Replacement Program,” below.

The Capital Improvement Program follows the conclusion of the ten-year period of the prior capital plan undertaken between 2012 to 2021 (the “2012 to 2021 CIP”), which was intended to address deferred maintenance and accelerate investment in water main replacement, meter installation, and upgrades to pumping stations and purification plants. During the 2012 to 2021 CIP, the Department replaced 778 miles of water mains, representing more than twice the annual rate as it had been replacing prior to the 2012 to 2021 CIP. The Department also installed 123,000 meters, designed the electrification of pumping stations (two designs are complete and one is in progress) rehabilitated the 68<sup>th</sup> Street crib and rehabilitated and upgraded the water system’s two purification plants. With respect to the Sawyer Plant, the Department replaced the medium voltage electrical power distribution systems, installed standby generators, new switchgears, and a dehumidification system, and replaced the filter backwash. At the Jardine Plant, the Department installed new Chlorine Scrubbers, new switchgears and standby generators, completed a new state of the art laboratory and replaced on the roof on the East Filter Building.

The Water System’s expenditures for 2017 through 2021 under the 2012 to 2021 CIP and projected expenditures for 2022 through 2026 under the Capital Improvement Program are summarized in the table below. The projected information presented in the table reflects the Department’s expected allocations of resources to various projects, but does not necessarily represent an expectation of actual cash expenditures for these projects, which are subject to annual approval of the Office of Budget and Management. The primary sources of funds to undertake these projects are expected to be proceeds from contemplated debt issuances, IEPA loans, as well as funding from current water revenue (also referred to as “Pay-Go”). In 2021 and 2022, as with other large infrastructure systems across the country, the Department experienced some project delays and increased costs due to shortages in supplies and manpower. The Department does not believe that its capital plans, as planned over the long term, will be materially impacted by prior years' shortages.

**2017-2026**  
**2017-2021 HISTORICAL AND 2022-2026 PROJECTED**  
**CAPITAL AND FACILITIES IMPROVEMENT PROGRAM FUNDING BY SOURCE**  
**(Dollars in Millions)**

<b>Funding Sources</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Bonds	\$ 57.1	\$ 22.0	\$ 5.1	\$ 5.5	\$ -	\$ 80.1	\$158.7	\$182.2	\$237.1	\$220.1
Pay-Go and TIF	172.8	173.3	174.4	104.3	84.8	119.2	64.8	32.3	28.8	27.6
WIFIA	-	-	-	-	-	15.0	56.1	84.7	86.7	71.2
IEPA Loans	118.0	106.9	69.2	30.0	84.6	61.4	53.7	33.3	21.9	35.5
Total	<u>\$347.9</u>	<u>\$302.2</u>	<u>\$248.7</u>	<u>\$139.8</u>	<u>\$169.4</u>	<u>\$275.8</u>	<u>\$333.3</u>	<u>\$332.5</u>	<u>\$374.5</u>	<u>\$354.4</u>

Amounts shown for years 2017-2021 are actual expenditures. Amounts shown for years 2022-2026 are as published in the City’s 2022-2026 Capital Improvement Program.

## **Lead Service Line Replacement Program**

There are approximately 387,00 lead service lines in the City, primarily in single-family and two-flat residences. Lead is a toxin that is harmful to human health. Developing fetuses, infants and young children are especially vulnerable. The Department has the largest lead database in U.S., having mailed over 100,000 lead test kits and distributed 61,000 water filter kits. As part of the City's plan to improve the quality of service lines providing water to the residents of the City, the City announced plans to replace every lead service line in the City ("Lead Service Line Replacement Program") in compliance with the State's Lead Service Line Replacement and Notification Act, 415 ILCS 5/17.12 ("Lead Service Line Replacement and Notification Act"), which was signed into state law on August 27, 2021, and became effective for Chicago on January 1, 2023. The City estimates that the full cost to replace all of the lead service lines in Chicago is \$8 to \$10 billion. Lead Service Line Replacement ("LSLR") consists of replacement of the water line running from the water main to the external water shut-off valve (sometimes called the "Buffalo-box" or "B-box") owned by the City (the "Public-side") and replacement of the water line running from the external water shut-off valve into the property owned by the private property owner (the "Private-side.").

### *Phase I LSLR*

In September 2020, prior to the effective date of the Lead Service Line Replacement and Notification Act, the City launched the initial phase of the Lead Service Line Replacement Program, which is voluntary for property owners ("Phase I"). Phase I aims to help residents who wish to replace their lead service lines and prioritizes those residents who are low-income. The City is offering two methods of City-assisted replacement in Phase I: (i) an Equity Lead Service Line Replacement Program, in which City contractors provide complete Public-side (Water System funded) and Private-side LSLR (funded from funds other than Water System funds) for eligible low-income residents; and (ii) a Homeowner-Initiated Lead Service Line Replacement Program, in which the City will waive up to \$5,000 in permit fees for qualified homeowners who wish to pay for their own full LSLRs. The Department projects that it will perform about 600 replacements per year under the Equity LSLR Program. The Department estimates that another 50-100 lead service line replacements will be performed per year under the Homeowner-Initiated LSLR Program. In late 2022, the Department also started the Daycare LSLR Program that is funded by grants from the State. Under this program the City will replace approximately 120 lead or galvanized iron service lines in 2023 for daycare facilities located in low-income neighborhoods and those located on blocks with higher crime rates.

### *Lead Service Line Replacement Report*

On April 29, 2021, the City released its Lead Service Line Replacement Report, which described the City's plans for Phase II and Phase III of the Lead Service Line Replacement Program, possible construction methods and costs, and potential funding sources. Phase II LSLR includes LSLR alongside water main replacements and LSLR for homeowners with leaks or breaks in their lead service lines, rather than patching or repairing them ("Leaks and Breaks LSLR"). Phase III LSLR is systematic LSLR on a block-by-block basis.

### *Lead Service Line Replacement and Notification Act*

On August 27, 2021, the Lead Service Line Replacement and Notification Act, was signed into state law and became effective for Chicago on January 1, 2023. Among other things, the Lead Service Line Replacement Act requires that owners and operators of community water supplies in the State develop, implement and maintain a comprehensive water lead service line replacement plan. The

legislation provides no funding for the replacement. Under the Lead Service Line Replacement Act, the City has 50 years (with the possibility of up to 15 years of extensions) to complete the entire LSLR work. The 50-year replacement period for the City is not triggered until April 15, 2027.

The Lead Service Line Replacement Act requires full water service line replacement whenever any lead or galvanized iron lines are broken or disturbed, including for service line leaks and breaks and water or sewer main replacement. In late 2022, the Department started the Leaks and Breaks LSLR Program. Under this program, the Department performs full lead service line replacement whenever there is a leak or break on a service line. The Department anticipates performing approximately 5,000 of these replacements annually under the Leaks and Breaks LSLR Program. In 2023, the Department also began LSLR for any lead or galvanized service lines connected to water mains or impacted by sewer mains that are being replaced as part of the Capital Improvement Program or as a result of the Sewer Fund capital improvement program. For 2023, the Department estimates that there are approximately 3,300 service lines impacted by water and sewer main replacements. The Department must perform Public-side LSLR when undertaking Capital Improvement Program work, but the Department requires owner consent for Private-side LSLR.

### **LSLR Funding**

The City estimates that the full cost to replace all of the lead service lines in the City is \$8 to \$10 billion.

#### *Use of Water Revenues to Fund Private-side LSLR*

The City cannot use Water Revenues to pay for the replacement of the Private-side of lead service lines (“Private-side LSLR”). City bond ordinances and the Master Indenture authorizing the issuance of outstanding water revenue bonds and related agreements provide that Water Revenues can only be used for Water System operation and maintenance and debt service payments on the applicable water revenue bonds. The term “Water System” is defined in the City’s water revenue bond ordinances and the Master Indenture as all property, real, personal or otherwise, owned or to be owned by the City or under the control of the City and used for water supply, distribution or collection purposes. The Private-side of the water service lines are not owned or controlled by the City; therefore the water revenue bond ordinances and the Master Indenture preclude the use of water rate revenues from being used to finance Private-side LSLR.

In addition, and although subject to change by the City Council, the Municipal Code of Chicago (the “Municipal Code”) does not currently permit the City to use Water Revenues for Private-side LSLR.

#### *Use of Water Revenues to Fund Public-side LSLR*

The City may use Water Revenues to pay for replacement of the Public-side lead service line (“Public-side LSLR”) as part of the City’s Water System. The City intends to utilize Water Revenues to finance Public-side LSLR through a mix of Water Revenue Bonds, Pay-Go, and WIFIA loans. See “WIFIA Loan,” below. In order to fund Private-side LSLR, the City anticipates utilizing SRF forgivable loan funding, and federal and State grants. In addition, in November 2022 the City appropriated \$60 million of general obligation bond funding to act as a backstop in case State and federal funding is not sufficient to fund Private-side LSLR.

The City cannot guarantee that the Lead Service Line Replacement Program will be implemented as described herein. See “INVESTMENT CONSIDERATIONS – Forward-Looking Statements.”

## *Infrastructure Investment and Jobs Act Funding*

On November 15, 2021, the Infrastructure Investment and Jobs Act, Public Law 117-58, was signed into federal law. Among other things, the Infrastructure Investment and Jobs Act provides historic funding for investments in water infrastructure. One highlight of the investments is \$15 billion in funding specifically earmarked for LSLR being made available to the states through the existing State Revolving Fund (“SRF”) programs. The new funding is expected to be provided over the course of five years beginning with federal fiscal year 2022. The Infrastructure Investment and Jobs Act provided that 49% of the funding must be provided in the form of additional subsidies to disadvantaged communities, which in Illinois may take the form of forgivable loans; the remaining funding will be provided for the purpose of loans under existing SRF programs. For federal fiscal year 2022, Illinois received an allotment of \$107 million for lead service line replacement. The IEPA has not yet determined how Illinois’ funding will be distributed to communities throughout the state. Historically, Chicago was not included by the State as a disadvantaged community. The City is working with IEPA to revise the definition of disadvantaged community so that Chicago receives an equitable share of this funding. The City is working with the State to determine how federal LSLR funds will be allocated statewide.

### **WIFIA Loan**

The City is currently negotiating a loan agreement with the US Environmental Protection Agency (“US EPA”) for a loan (the “WIFIA Loan”) under the Water Infrastructure Finance and Innovation Act (“WIFIA”) for \$336 million to fund Public-side LSLR and the replacement of water mains. The issuance of a second lien water revenue bond (“WIFIA Bond”) to secure the WIFIA Loan was approved by the Chicago City Council on November 7, 2022. WIFIA loans offer multiple benefits to borrowers, including:

- Five years to draw down funds; flexibility on when principal payments must begin.
- Prepayable with no penalty at any time over the life of the 35-year term loan.
- Flexibility to structure WIFIA debt to achieve overall debt service goals.

The City does not intend making its first draw on the WIFIA Loan until the end of 2023 at the earliest, and does not anticipate drawing the full WIFIA Loan amount until the five-year draw period is complete.

The WIFIA loan will be secured by the WIFIA Bond on parity with the Bonds under the terms of the Master Indenture and is anticipated to be issued in May, 2023.

### **Quality of Water Supplied**

The quality of the water drawn by the City from Lake Michigan meets currently applicable federal and State standards in all material respects. The water operations of the Department are subject to the requirements of the federal Safe Drinking Water Act of 1974, 42 U.S.C. §300f et seq., as amended in 1986 and 1996 by Congress (the “Safe Drinking Water Act”). The Safe Drinking Water Act sets the regulatory agenda of US EPA, to include, among other things, the development of drinking water standards for more than 90 contaminants. In addition, the Department is subject to compliance of Title 35, Subtitle F, Chapter 1, Part 611 of Illinois Administrative Code as the IEPA has primary authority over drinking water utilities within Illinois.

The Department is in compliance with all physical, chemical, radiological, and bacteriological standards established by the regulations currently in effect under the Safe Drinking Water Act and is



studying the potential impacts of proposed rules as well as those still under development by the US EPA. As the US EPA promulgates additional regulations, the Department could potentially be required to modify operations and/or construct facilities beyond those contemplated by the Capital Improvement Program. The Department believes, however, that planned capital projects should address all current regulatory requirements.

Water treatment at each plant includes the addition of chlorine to disinfect, fluoride to help fight tooth decay, coagulants to settle out impurities in the water and blended phosphate to coat pipes and service lines.

The Department has state-of-the-art microbiology and chemistry laboratories at each plant that conduct compliance sampling for the treatment process and distribution system. The Department recently spent \$10 million to upgrade both laboratories at the Jardine Plant with the latest and most advanced technologies; reflecting these enhanced capabilities, the Jardine Water Purification Plant facilities received designation as IEPA Certified laboratories. In addition to ongoing water quality monitoring, these laboratories help advance the Department's ongoing research on water treatment, including use of ortho-phosphate to enhance corrosion control in the City's distribution system and support LSLR efforts.

The IEPA implemented a Source Water Assessment Program ("SWAP") to assist with watershed protection of public drinking water supplies. The SWAP inventoried potential sources of contamination and determined the susceptibility of the source water to contamination. The IEPA has completed the SWAP for the City's water supply. The SWAP, as implemented, helps the City make important decisions about how to protect Lake Michigan as its drinking water source. By working to ensure safe drinking water supplies, the health and economy of the community and the preservation of natural resources may be greatly improved. However, at certain times of the year the potential for contamination still exists due to wet-weather flows. In addition, the crib structures serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intakes and thus compromising the source water quality. Additionally, the shore intakes may be susceptible to contaminants from storm water runoff, marinas and shoreline point sources due to the influx of groundwater to the lake. Having this information allows the Department to continually monitor water quality throughout the treatment process to ensure compliance with all standards established by the regulations currently in effect under the Safe Drinking Water Act.

*Lead and Copper Rule Compliance.* Pursuant to the Safe Drinking Water Act, the Department is required to conduct Lead and Copper Rule ("LCR") monitoring every year. The Department continues to be in compliance with the LCR; its only LCR violation was in 1993. In 2022 the Revised Lead and Copper Rule ("RLCR") was released changing sampling protocols, collecting water closer to a lead service line. Based on significant data collected through the Department's lead testing programs, the Department expects a small increase in its compliance results but does not expect a violation. Further, to reduce the leaching of metals, including lead, the Department adds a blended phosphate to the water before it enters the distribution system, which promotes the formation of a protective coating inside pipes and plumbing; this system of corrosion control corrected the LCR violation found in 1993. In 2024 the corrosion control chemical will switch to an orthophosphate which has shown in full-scale testing in Chicago to significantly reduce lead leaching.

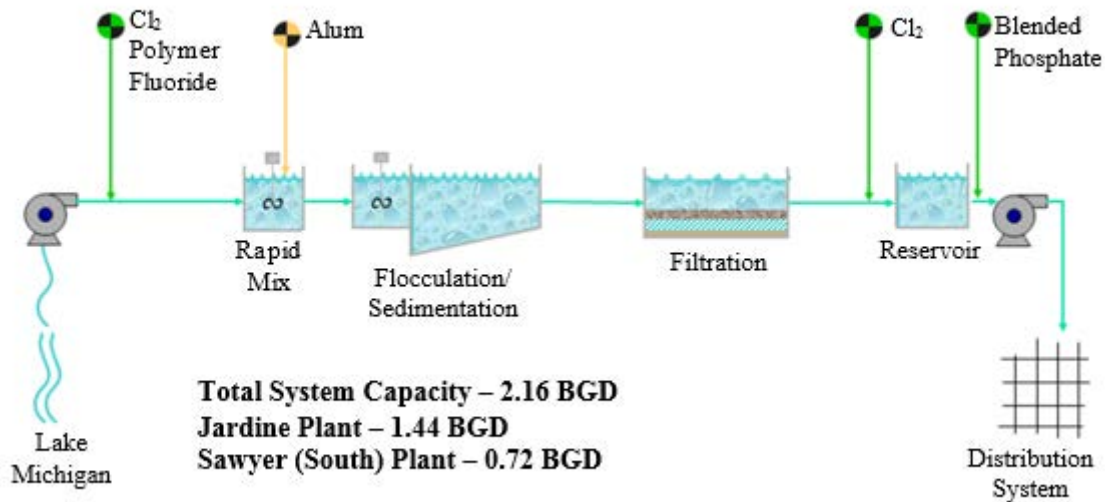
The Department monitors tap water quality and performs testing 24 hours a day, seven days a week. The City's tap water meets all US EPA and State health standards for safe, clean drinking water. The Department had no violation of a contaminant level or of any other water quality standard in its most recent Consumer Confidence Report, delivered earlier in 2022.

*Monitoring.* The City continues monitoring for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. To date, Cryptosporidium has not been detected in these samples, but Giardia was detected in one raw lake water sample collected in September 2010. Treatment processes have subsequently been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced.

US EPA has also recently proposed regulations for six existing Per/Polyfluoroalkyl Substances (“PFAS”) compounds at extremely low levels. The Department has proactively monitored for all six proposed PFAS compounds and while there have been small detections in Lake Michigan there have been no detections in the City’s treated water. Available data suggests the City’s current treatment is sufficient to meet the proposed regulatory requirements. Based on such available data the Department expects it will be in compliance with the proposed regulations, should they come into effect as proposed.

Currently, the City has also continued monitoring for hexavalent chromium, also known as chromium-6. US EPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources.

A diagram of the City’s water treatment process is set forth below:



## WATER SYSTEM SERVICE AREA

### Service Area

The Water System supplied water to a service area of approximately 783 square miles as of December 31, 2022. The City accounted for approximately 228 square miles and the suburban customers accounted for approximately 555 square miles of the service area.

On May 1, 2023, the City entered into a water supply contract with the City of Joliet, to begin water service in 2030 (see “New Water Service to the Southwest Suburbs: Joliet and the Grand Prairie Water Commission (GPWC)”, below).

### Population Served

The following table shows the population for the City and the suburban customers of the Water System as shown in each decennial census since 1970:

#### WATER SYSTEM SERVICE AREA POPULATION<sup>(1)</sup>

<u>Year</u>	<u>Chicago</u>	<u>Suburban Customers</u>	<u>Total</u>	<u>Number of Suburbs Served</u>
1980	3,005,072	1,152,614	4,157,686	75
1990	2,783,726	1,589,557	4,373,283	95
2000	2,896,016	2,410,021	5,306,037	125
2010	2,695,598	2,600,496	5,296,094	125
2020	2,746,388	2,513,390	5,259,778	120

<sup>(1)</sup> Source of population figures: U.S. Department of Commerce, Census Bureau.

For additional economic and demographic information regarding the City and the Water System, see APPENDIX E – “INFORMATION REGARDING THE CITY OF CHICAGO ECONOMY AND DEMOGRAPHICS.”

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The following table lists the 120 suburban customers currently served, directly or indirectly, by the Water System.

**SUBURBAN CUSTOMERS SERVED BY THE WATER SYSTEM**

Addison	Elk Grove Village	Lyons	Robbins
Alsip	Elmhurst	Markham	Rolling Meadows
Bartlett	Elmwood Park	Matteson	Roselle
Bedford Park	Evergreen Park	Maywood	Rosemont
Bellwood	Forest Park	McCook	Schaumburg
Bensenville	Forest View	Melrose Park	Schiller Park
Berkeley	Franklin Park	Merrionette Park	South Holland
Berwyn	Garden Homes	Midlothian	South Stickney
Bloomington	Sanitary District	Mokena	Sanitary District
Blue Island	Glen Ellyn	Mount Prospect	Stickney
Bolingbrook	Glendale Heights	Naperville	Stone Park
Bridgeview	Hanover Park	New Lenox	Streamwood
Broadview	Harvey	Norridge	Summit
Brookfield	Harwood Heights	North Riverside	Thornton
Burnham	Hazel Crest	Northlake	Tinley Park
Burr Ridge	Hickory Hills	Oak Brook	Villa Park
Calumet City	Hillside	Oak Forest	Westchester
Calumet Park	Hinsdale	Oak Lawn	Westmont
Carol Stream	Hodgkins	Oak Park	Wheaton
Central Stickney	Hoffman Estates	Oakbrook Terrace	Willow Springs
Sanitary District	Homer Township	Olympia Fields	Willowbrook
Chicago Ridge	Hometown	Orland Park	Winfield
Cicero	IAWC <sup>(1)</sup>	Palos Heights	Wood Dale
Clarendon Hills	Indian Head Park	Palos Hills	Woodridge
Country Club Hills	Itasca	Palos Park	Worth
Countryside	Justice	Park Ridge	
Crestwood	La Grange	Phoenix	
Darien	La Grange Highland	Plainfield	
Des Plaines	Sanitary District	Posen	
Dixmoor	La Grange Park	River Forest	
Dolton	Leyden Township	River Grove	
Downers Grove	Lisle	Riverdale	
East Hazel Crest	Lombard	Riverside	

Source: City of Chicago, Department of Water Management.

<sup>(1)</sup> IAWC (Illinois American Water Company, formerly Citizens' Utilities Company of Illinois) serves 11 unincorporated areas in Cook and DuPage Counties, Illinois.

**City Water Accounts**

As of December 31, 2021, the Water System supplied 494,329 City accounts. Of these, 176,931 were non-metered and 317,398 were metered. The number of metered accounts has exceeded the number of non-metered accounts as a result of the Meter Installation Program for all single-family and two-family dwellings within the City. Water meters are required on all new construction of single-family and two-family dwellings within the City and on any new services to existing buildings in the City. All suburban customers (primarily municipal corporations) are metered.

The following table reflects the total accounts of the Water System, non-metered and metered, for the past 10 years:

**WATER SYSTEM ACCOUNTS**

<b>Year Ended December 31</b>	<b>Non-Metered</b>	<b>Metered</b>	<b>Total</b>
2012	290,863	205,097	495,960
2013	273,426	220,759	494,185
2014	250,304	241,304	491,608
2015	227,801	266,284	494,085
2016	206,913	287,351	494,264
2017	190,276	303,877	494,153
2018	180,608	313,758	494,366
2019	178,348	316,262	494,610
2020	177,641	316,783	494,424
2021	176,931	317,398	494,329

Source: City of Chicago, Department of Water Management.

**Non-City Customers**

*Suburbs.* The Department’s service to its suburban customers is based on various contracts and on an Illinois statute (the “WRD Statute”) which establishes and authorizes the operation of the Metropolitan Water Reclamation District of Greater Chicago (the “Water Reclamation District”). The Water Reclamation District currently serves municipalities in the Chicago area and its function is to construct, maintain and operate sewage treatment plants, necessary sewers, and drainage outlets. The WRD Statute requires the City to supply water at the City limits to any municipal corporation within the Water Reclamation District, if such municipal corporation builds suitable water mains to the City’s corporate limits. While the WRD Statute also provides that the City shall sell water to such municipal corporations at a rate at no greater price or charge than that applicable to similar large users in the City, that statutory requirement may be superseded by the City exercising its home rule power to charge a different rate by enacting an ordinance authorizing a different rate than that required by the WRD Statute. The City’s plans to transition to a Cost-of Service-Rate (as defined below) for its suburban customers are expected to be implemented by enactment of one or more City ordinances authorizing the Cost-of-Service Rate. See “FINANCIAL OPERATIONS – Transition to AWWA Cost-of-Service Water Rate Methodology for Suburban Customers.”

Currently, the Department’s outstanding contracts with its suburban customers generally have terms of 10 years with three 10-year extensions for a total of 40 years and include certain water supply and planning provisions, such as requiring the suburban customers to maintain storage capacity for a two-day supply of water and establishing the maximum rate at which suburban customers may withdraw water from the Department’s mains. The Department has continued to supply water at the current water rate to those suburban customers that have not yet renewed their contracts. While the City may be precluded from shutting off water service to suburban customers for failure to pay amounts owed, the City has available legal remedies to enforce such contracts.

The respective contracts which the City has executed with the Northwest Suburban Municipal Joint Action Water Agency (“JAWA”) and the DuPage Water Commission (“DWC”), differ from the standard contracts described above. The contracts with JAWA and DWC are for 40-year terms, expire in 2032 and 2024, respectively, and contain provisions regarding shared responsibility for capital

expenditures and Operation and Maintenance Costs of the pumping stations that serve them. The Village of Oak Lawn (which serves several other south and southwestern suburban customers as the Oak Lawn Regional Water System) entered a contract with the Department in 2013 with a 30-year term, expiring at the end of calendar year 2042 with an option by Oak Lawn to extend the contract for a further ten years. In 2021, DWC was the Department's largest suburban customer, Oak Lawn was the second largest suburban customer and JAWA was the third largest suburban customer, with sales of approximately \$113.3 million, \$42.4 million and \$41.7 million, respectively.

In 2021, the suburban customers accounted for approximately 38% of water pumpage and approximately 50% of net water sales of the Water System.

### **New Water Service to the Southwest Suburbs: Joliet and the Grand Prairie Water Commission (GPWC)**

Responding to studies by the Illinois State Water Survey confirming that the water source of the City of Joliet, Illinois ("Joliet") of deep underground aquifers was rapidly depleting and would be unable to meet water demand as early as 2030, in 2018 Joliet initiated an Alternative Water Source Study to identify a new and reliable source of potable water. In order to stabilize the competitive water landscape, the City approached the City of Joliet as Joliet searched for an alternative water supply. Following comprehensive study and evaluation, Joliet decided to obtain Lake Michigan water, and in January 2021 the Joliet City Council selected Chicago as its new water supplier.

Since that time, the City and Joliet were engaged in negotiations to develop a Water Supply Agreement (the "Chicago-Joliet WSA") that entails design and construction of the significant new water infrastructure required to supply water to Joliet by 2030. During these discussions, Joliet has engaged five other communities in the southwest suburbs whose groundwater sources also are depleting (Channahon, Crest Hill, Minooka, Romeoville, Shorewood) in a preliminary agreement to join the new Grand Prairie Water Commission ("GPWC"), which was authorized by state legislation in 2022 and is now in the process of legally forming.

The Chicago-Joliet WSA was authorized by the City Council and by the Joliet City Council in April 2023 and was fully executed and effective on May 1, 2023. The Chicago-Joliet WSA will then facilitate the largest expansion of the Water System in 40 years and is estimated initially to generate approximately \$30 million in additional annual gross revenue and \$1 billion in aggregate net present value to the City's Water Fund. It is anticipated that the City will incur \$30 million in capital costs in order to provide water to Joliet and the GPWC which the City expect to recover through the rate setting methodology set forth in the Chicago-Joliet WSA beginning once Chicago commences to provide water to Joliet. Pursuant to the Chicago-Joliet WSA, through the GPWC, the Chicago-Joliet WSA will provide water to roughly 250,000 residents of the southwest suburbs. The Department anticipates that the Chicago-Joliet WSA will be assigned to the GPWC under substantially the same terms as the Chicago-Joliet WSA. The term of the Chicago-Joliet WSA is 100 years with the option for two additional ten (10) year extensions.

Joliet and the member communities of the GPWC will pay the Cost-of-Service Water Rate (as defined below, see "FINANCIAL OPERATIONS – Transition to AWWA Cost-of-Service Water Rate Methodology for Suburban Customers.")

**Establishment of the Chicago Water Partners Advisory Council (CWPAC)**

In June 2022 in order to help the City strengthen its relationships with its suburban wholesale customers the City Council authorized the establishment of a new advisory body called the Chicago Water Partners Advisory Council (the “CWPAC”). The members of the CWPAC comprise representatives of all suburban water customers of the Chicago Water System.

The mission of the CWPAC, which held its initial quarterly meeting in June 2022, is two-fold. First, the organization provides recommendations to the Commissioner on operational, capital improvement, the Cost-of-Service Water Rate, and other matters regarding the Water System. Second, the CWPAC is intended to foster and enhance regional collaboration on water policy issues, providing an ongoing platform for sharing of information and industry best practices, including, when appropriate, taking positions on matters external to the Department concerning broader water policy. Examples of the latter could include commenting upon proposed regulatory changes by the Illinois Department of Natural Resources (“IDNR”) or the IEPA. All recommendations provided by the CWPAC are non-binding and strictly advisory in nature.

In order to facilitate the creation of the CWPAC and strengthen relationships with its suburban wholesale customers, in 2021 the City also created in the Department of Water Management the position of Deputy Commissioner, Regional Partnerships.

**Largest Suburban Customers**

Listed below are the Department’s 10 largest suburban customers in 2021. Most of these customers supply one or more other suburban customers. No one customer represents more than 15% of water revenues.

**10 LARGEST SUBURBAN CUSTOMERS OF  
THE WATER SYSTEM IN 2021**

<b>Customer</b>	<b>Amount of Sales (in Thousands)</b>
DuPage Water Commission (DWC).....	\$113,250
Oak Lawn, Illinois .....	42,415
Northwest Suburban Municipal Joint Action Water Agency (JAWA) .....	41,655
Bedford Park, Illinois.....	28,736
Harvey, Illinois .....	14,265
Melrose Park, Illinois.....	14,074
Cicero, Illinois .....	10,590
McCook, Illinois .....	9,148
Alsip, Illinois .....	8,034
Berwyn, Illinois .....	7,598
Total.....	\$289,765

Source: City of Chicago, Department of Water Management.

The Department intends that upon contract renewal, updated contracts will include provisions for the transition to Cost-of-Service Water Rate. See “FINANCIAL OPERATIONS – Transition to AWWA Cost-of-Service Water Rate Methodology for Suburban Customers.”

From time to time, the City is notified that one or more suburban communities that now receive water service from the City are considering potential alternative sources for their water supply. The City lost Niles and Morton Grove in 2019 followed by Lincolnwood in 2021 as water supply customers, which together represented approximately \$8 million in annual water revenues. In 2022, the cities of Homewood and Flossmoor left Harvey, a Chicago customer, as its water supplier. On the other hand, also in 2021, the communities of Oswego, Montgomery, and Yorkville announced their intention to begin taking water from the DWC, beginning in 2027. The DWC also began water service to the Village of Bartlett in 2019.

See “LITIGATION” for a discussion of certain litigation by the City to recover moneys owed to the City under certain of its water supply contracts.

*State of Illinois.* The State of Illinois (the “State”) is obligated to make payments to the City in instances where it is a user of the Water System, except in situations and to the extent that the applicable State property qualifies for an exemption. The revenue from the State as user constitutes less than one percent of the Water System’s annual operating revenues. No operating revenues from any users of the Water System (other than the State) flow through the State; all such revenues are paid directly to the City.

### **Water Pumpage**

During 2022, the Water System pumped approximately 238 billion gallons of water. Because the Water System supplies water to non-metered customers and certain exempt users, many of which are also not metered, it is impossible for the Department to account exactly for its total system pumpage. However, the Department estimates that, in 2022, total water losses were approximately 6% of total pumpage.

#### **WATER PUMPAGE TO CITY AND SUBURBAN CUSTOMERS** (in Millions of Gallons)

<u>Year</u>	<u>City</u>	<u>DWC</u>	<u>Other Suburban Customers</u>	<u>Total</u>
2013	173,877	28,113	63,433	276,039
2014	173,804	27,219	73,529	274,552
2015	164,187	26,776	71,643	262,606
2016	159,161	26,938	70,521	256,620
2017	153,049	27,049	67,999	248,097
2018	153,477	27,035	69,079	249,591
2019	149,009	25,957	65,999	240,964
2020	142,309	27,218	64,900	234,427
2021	144,753	27,565	65,854	238,172
2022	145,628	27,702	64,741	238,072

Source: City of Chicago, Department of Water Management.

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As the table below indicates, from 2013 through 2022 the Water System’s maximum daily pumpage ranged from 39% to 51% of the Water System’s capacity.

**WATER SYSTEM PUMPAGE AND CAPACITY 2013-2022**

<b>Year</b>	<b>Total Annual Pumpage (MGD)</b>	<b>Average Daily Pumpage (MGD)</b>	<b>Maximum Daily Pumpage (MGD)</b>	<b>System’s Rated Pumpage Capacity (MGD)</b>	<b>Maximum Daily Pumpage as % of Capacity</b>
2013	276,039	756	1,095	2,160	51
2014	274,552	752	1,023	2,160	47
2015	262,606	719	890	2,160	41
2016	256,620	701	903	2,160	42
2017	248,097	680	922	2,160	43
2018	249,591	684	859	2,160	40
2019	240,964	660	838	2,160	39
2020	234,427	641	842	2,160	39
2021	238,172	653	836	2,160	39
2022	238,072	652	873	2,160	40

Source: City of Chicago, Department of Water Management.

**Lake Michigan Allocations**

*City Allocations.* Diversion of water from Lake Michigan began in 1900 when the flow of the Chicago River was reversed. In 1922, the State of Wisconsin filed the first lawsuit relating to the diversion of Lake Michigan water at Chicago. The United States Supreme Court referred the case to a Special Master and a decree was issued in 1930 which allowed the State to divert 6,500 cubic feet per second (“cfs”) until 1938 and 1,500 cfs thereafter. Water pumpage for potable water supply use was not chargeable to the amounts allowed for diversion under the decree. In 1957, the State of Wisconsin again filed suit in the United States Supreme Court. The suit led to the appointment of a Special Master and the resultant 1967 decree, based on the Special Master’s findings, restricted the State from diverting more than 3,200 cfs (2,068 MGD). This limitation on diversion includes water pumpage for potable water supply.

In a related matter, on July 26, 1996, the State, the seven other Great Lakes states, the United States and the Water Reclamation District entered into a Memorandum of Understanding (“MOU”) with respect to water diversion from Lake Michigan. The MOU was designed to address a dispute among the states as to an alleged violation of the decrees of the United States Supreme Court (discussed above) limiting the total amount of water diverted by the State and its political subdivisions. The other Great Lakes states contended that the water being diverted had exceeded the Supreme Court’s limitation of 3,200 cfs.

To address the other Great Lakes states’ concern that the State was exceeding its diversion limit, the State agreed to (1) maintain its diversions at the Supreme Court’s limit and in fact, to use less than the 3,200 cfs for the next 20 years, (2) reduce leakage at the Chicago River Controlling Works, (3) reduce diversion for navigation make-up, and (4) complete allocation proceedings regarding all domestic and industrial Illinois Lake Michigan water users. The MOU also provided that the State shall use its power to ensure that municipalities using water from Lake Michigan, including the City, comply with allocation limits, unaccounted-for-flow requirements, and conservation requirements required by State law, regulation, court order, consent decree or settlement agreement.

The City was not a signatory to the MOU, but in 1996, in an effort to assist the State in meeting the diversion requirements set out in the MOU, voluntarily agreed to expand a Water Conservation Plan initially implemented by the Department in 1989. The City’s 1996 Water Conservation Plan (the “1996 Plan”) expanded the repair program to eliminate or prevent delays in leak repairs, expanded its public education program and required the metering of various large non-metered water users. Since the MOU, the City has seen a decrease in its actual water usage.

*Illinois Allocations.* The IDNR, previously a part of the Illinois Department of Transportation (“IDOT”), is responsible for the apportionment of Lake Michigan water within the State pursuant to the Level of Lake Michigan Act (615 ILCS 50/1 et seq.). On July 28, 1999, IDNR entered its allocation Order LMO 99-3 with respect to its allocations of Lake Michigan water. The allocations under Order LMO 99-3 to the City and to the suburbs served by the City are as follows:

**LAKE MICHIGAN ALLOCATION UNDER ORDER LMO 99-3  
TO CITY AND SUBURBS SERVED BY CITY<sup>(1)</sup>**

<u>Year</u>	<u>City</u>	<u>Suburbs</u>	<u>Total</u>
2000	713.0	334.3	1,047.3
2010	737.1	362.2	1,099.3
2020	750.1	377.1	1,127.2

<sup>(1)</sup> Source: IDNR. Allocations are rounded to tenths; actual allocations are specific to .001 MGD.

Currently, the IDNR is reviewing all domestic Lake Michigan water allocations and considering proposed allocation adjustments for all permittees to reflect current use and future demands out to the year 2050. The proposed allocation adjustment would reduce the City’s allocation by approximately 20%. A hearing on the proposed allocation adjustments will be held in the Summer, 2023. Even with these reductions, however, Chicago’s allocation will still be above the anticipated actual daily usage through 2050.

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## FINANCIAL OPERATIONS

### Rates, Fees, and Users

The Water Fund receives no share of any state or local property or income taxes. Revenues from the sale of water provide for the operation, maintenance and debt service of the Water System. The City obtains Water System operating revenues only from the users of the Water System. The operating revenues from users of the Water System do not flow through the State, any State agency, or any other political subdivision, but are paid directly to the City. See “WATER SYSTEM SERVICE AREA – Non-City Customers” below.

Water System rates are currently set by the City Council. No regulation by any administrative agency applies to Water System rates. Current Water System rates for metered accounts are based on a dollar rate per thousand cubic feet. The assessment of non-metered users is based on a formula primarily involving the front width of the building and the number of stories therein plus a charge for an outside hose connection and extra charges for large water-using devices such as water-cooled air conditioners. See “– Water System Rates” and “Transition to AWWA Cost-of-Service Water Rate Methodology for Suburban Customers” below.

Certain publicly owned properties and not-for-profit organizations enjoy exemptions from the payment of Water System rates in connection with metered accounts. These exemptions range from 100% (e.g., for many publicly owned entities such as properties owned by the City and certain not-for-profit organizations that have net assets or fund balances at the end of the year preceding the water rate charge of less than \$1 million) to 25% (e.g., for not-for-profit organizations having net assets or fund balances at the end of the year preceding the water rate charge of greater than or equal to \$10 million but less than \$250 million).

Whenever projected Gross Revenues will not be sufficient to comply with the Rate Covenant in the Indenture, the City is required to prepare a rate study for the Water System identifying the rate charges necessary to comply with the Rate Covenant, and the Budget Office and the Chief Financial Officer are required to recommend appropriate action to the City Council to comply with the Rate Covenant, which may include rate increases and/or expenditure reductions. See “INTRODUCTION – Rate Covenant.”

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## Water System Rates

Historical Water System rates, as authorized by the City Council, are summarized in the table below. By ordinance, annual Water System rates are now automatically adjusted by applying to the previous year’s rates the rate of inflation, calculated based on the Consumer Price Index published by the United States Bureau of Labor Statistics for the 365-day period ending on the most recent January 1. Such increases do not require further action by the City Council. Any such automatic annual increase, however, is capped at 5% of the previous year’s rate. Subject to applicable rate covenants, the City Council may take action at any time to alter the then-current schedule of water rates. On June 1, 2023, the water rate will increase by 5% to \$4.55 per 1,000 gallons.

Historical Water System rates, as authorized by the City Council, are summarized in the table below.

### HISTORICAL WATER RATE INCREASES

<u>Date Effective</u>	<u>1,000 Cubic Feet</u>	<u>1,000 Gallons</u>	<u>Increase Over Prior Rate (%)</u>
Jan. 1, 2013	21.56	2.88	15.00
Jan. 1, 2014	24.80	3.31	15.00
Jan. 1, 2015	28.52	3.81	15.00
June 1, 2016	28.52	3.81	0.00
June 1, 2017	29.04	3.88	1.83
June 1, 2018	29.49	3.95	1.54
June 1, 2019	29.73	3.98	0.82
June 1, 2020	30.46	4.08	2.45
June 1, 2021	30.79	4.13	1.10
June 1, 2022	32.33	4.33	5.00

Source: City of Chicago, Department of Water Management.

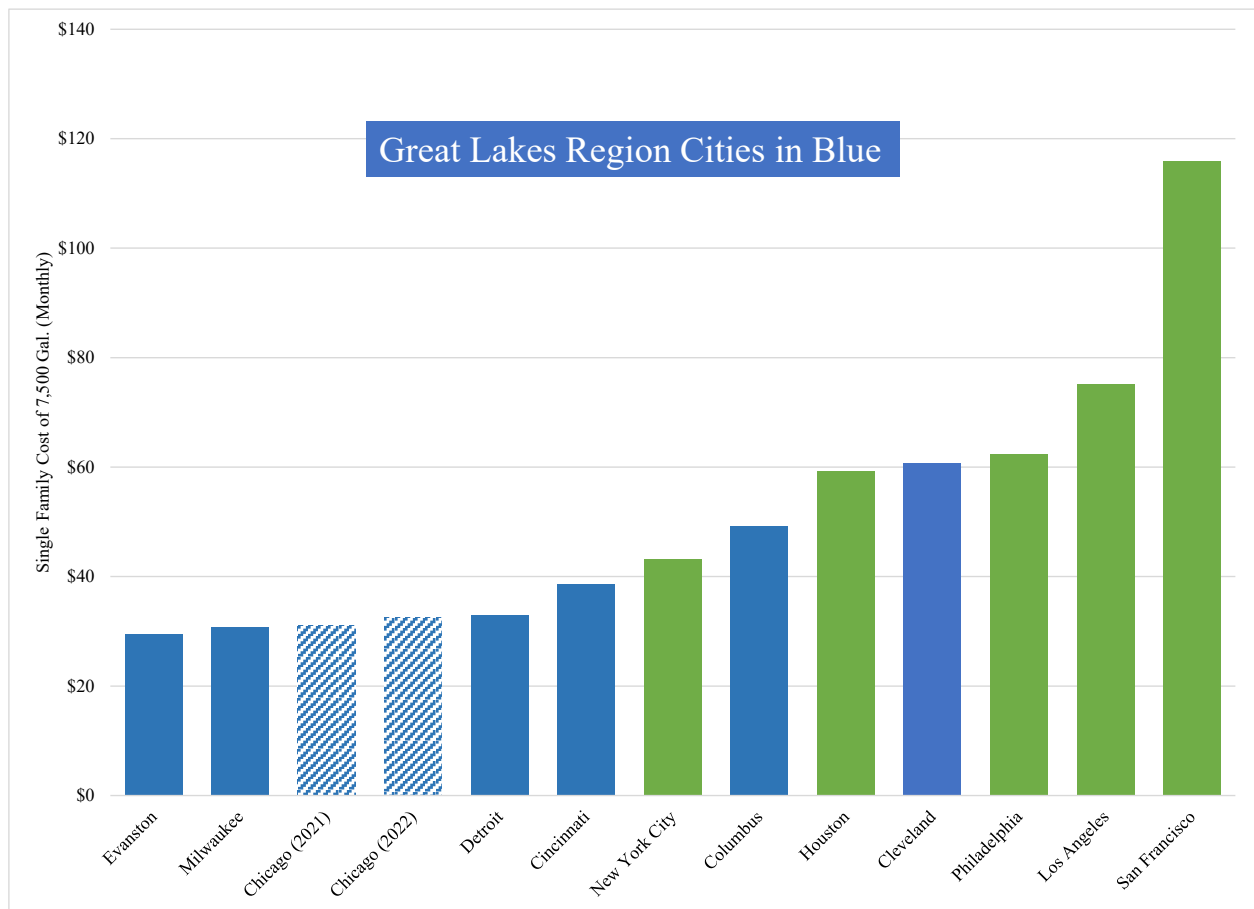
## Transition to AWWA Cost-of-Service Water Rate Methodology for Suburban Customers

Beginning in 2030, the City intends to commence transitioning from its current uniform rate for suburban customers to a rate based upon cost of service (the “Cost-of-Service Water Rate”). The methodology for calculating the Cost-of-Service Water Rate will be based upon relevant case law and the AWWA M1 Principles of Water Rates, Fees, and Charges (the “M1 Manual”). The M1 Manual is considered to be the industry standard for setting water rates by public water suppliers nationally and is used by peer entities such as Great Lakes Water Authority, Metropolitan Water District of Southern California, the City of Houston, the City of Philadelphia, San Francisco Public Utilities Commission, and San Diego County Water Authority. Under the Cost-of-Service Water Rate, rates will be developed based upon the specific facilities and components of the water supplier’s system that are “used and useful” in providing water service to each wholesale customer. Cost of service will be determined based on the portions of the system that each customer uses. Growth in the rate over time is capped at the greater of CPI or 5% (the “Inflation Cap”), but with a 10-year lookback that allows the City to recover the AWWA rate when it’s higher than the Inflation Cap across a 10-year period. This process offers wholesale customers greater transparency and predictability concerning water rates, and is a continuation of the City’s efforts to strengthen its relationship with its suburban customers and improve its competitive position within the region. The City does not expect the transition to the Cost-of-Service Water Rate to affect the City’s ability to meet its covenants under the Indenture.

## Water Rate Comparisons

The following chart compares the Water System’s single-family cost per 7,500 gallons of water to the rates charged for the same level of water usage by water systems serving other selected U.S. cities. The reader should note, however, that other cities’ water rates shown below may be based on different assumptions which could render any comparison less reliable. Further, the Water System rate shown below applies only to metered accounts for the Water System and not to non-metered accounts.

**Water Rate Comparison (as of September 2022) Chicago and Other Selected U.S. Cities**  
**Single Family Cost per 7,500 Gallons of Water**



Source: City of Chicago, Department of Water Management.

## Collections and Delinquencies

The Department of Finance follows the same collection strategy for collecting water accounts and sewer accounts, as described below. The Department of Finance bills most large industrial, commercial and wholesale municipal accounts each month, with a few exceptions that are billed quarterly. Metered residential accounts and smaller accounts are generally billed once every two months, unless a customer

enters into a payment arrangement or enrolls in the UBR Program (as defined below), in which case they are billed monthly. As of December 2020, non-metered accounts are billed monthly.

Payments on both metered and non-metered accounts are due 21 days after the bills are issued. A late payment penalty assessed at a monthly rate of one and one-fourth percent is imposed on all charges in excess of \$10.00 for which payment in full is not received within 30 calendar days from the date the bill was issued.

Delinquency notices, which were generated at an average rate of 6,564 per week in 2022, are sent to delinquent account holders when their balances are 30 days past due. A second delinquency notice is sent after 60 days. A third delinquency notice is sent after 90 days. After an active account reaches 365 days past due with a balance greater than \$1,000, the account is referred to an outside law firm for collections. Inactive accounts (those that do not currently have water or sewer service) that are 91 days past due with balances of \$200 or greater are referred to an outside law firm for collection. The outside law firm may pursue collection by obtaining a judgment at the City of Chicago Department of Administrative Hearings, by recording a lien against the property, or by additional legal collection actions. Additionally, by ordinance, when a property is transferred, a deed cannot be recorded with the Cook County Recorder of Deeds unless the Department of Finance certifies that all service charges and penalties due and owing on the unified utility bill for service to that property have been paid in full.

See also “LITIGATION” for a discussion of certain litigation by the City to recover moneys owed to the City under certain of its water supply contracts.

### **Chicago Water and Sewer Tax-Unified Billing**

On September 14, 2016, the City Council approved a tax on the use or consumption of water in the City, and on the transfer of wastewater to the City’s sewer system (the “Sewer System”) from properties located in the City (subject to certain exceptions) (the “Chicago Water and Sewer Tax”). The Chicago Water and Sewer Tax revenues are not Gross Revenues of the Water System and will not be utilized for the operations of the Water System, and the Chicago Water and Sewer Tax revenues will not be pledged to the repayment of the Bonds. The Chicago Water and Sewer Tax current rate is \$1.255 per 1,000 gallons. The Chicago Water and Sewer Tax appears as a separately stated item on the Unified Bill (as defined below) for City-provided water, sewer and refuse collection services.

Chicago residents receiving both water and sewer service from the City, as well as refuse collection services provided by the City’s Department of Streets and Sanitation, are sent a unified utility bill (“Unified Bill”) which details the charges for each service. The Chicago Water and Sewer Tax also appears as a separately stated item on the Unified Bill for City-provided water, sewer and refuse collection services. Pursuant to the Municipal Code, payments on the Unified Bills are allocated pro rata among the charges shown on the bills, with oldest unpaid amounts being paid first. The first unified bills which included refuse collection services were sent between April and September 2016 to City residents. Beginning in March 2017, the Unified Bills also included the Chicago Water and Sewer Tax as a separate charge. Pursuant to the Municipal Code, payments on the Unified Bill are allocated pro rata among the water, sewer and refuse collection charges and fees, with oldest unpaid amounts being paid first. On January 1, 2017, the Chicago Water and Sewer Tax on the use or consumption of water in the City, and on the transfer of wastewater to the Sewer System from properties located in the City, which appears on the unified bill became effective. Partial bill payments made, starting in 2017, on the Unified Bill are applied pro rata among the water, sewer, refuse collection and Chicago Water and Sewer Tax charges, with the oldest unpaid amount being paid first. No assurance can be given, however, that this will always be the method of allocation of partial payments. It is possible that partial payments may be allocated in the future in a non-pro rata manner, in which event water charges could receive a lower priority than

refuse collection charges, sewer charges and/or the Chicago Water and Sewer Tax in allocating partial payments. The Water Fund has not experienced a decline in collections since the Chicago Water and Sewer Tax was imposed. No assurance can be given as to the impact of the Unified Bill or the Chicago Water and Sewer Tax on the future collection by the City of water charges. Although the pro rata allocation may be changed by the City Council in the future, to date, the allocation of payments or of partial payments on the Unified Bills to water accounts sewer accounts, Chicago Water and Sewer Tax and refuse collection services has not had a material adverse effect on the collection by the City of water charges.

**Utility Billing Relief Program**

In 2019, the City implemented a moratorium on water shutoffs for non-payment. In April 2020, in order to address issues with water affordability for low-income residents, the City launched the Utility Billing Relief Program (the “UBR Program”). The UBR Program provides low-income City residents with a reduced rate on their water rate, sewer rate, and water-sewer tax as well as debt relief for those who demonstrate they can manage the reduced rate bills for one year. Benefits for UBR participants include: a reduced rate on water rates, sewer rates, and water-sewer taxes; no late payment penalties or debt collection activity; and debt forgiveness after successfully completing one year with no past due balance. In order to be eligible for the UBR Program, an applicant must meet the income criteria for the Low Income Home Energy Assistance Program, which is currently have income at or below 200% of the federal poverty level and must own and reside in the single family home or 2 unit property associated with the overdue bills account and for which relief is sought. As of December 2022, the UBR program has helped over nearly 20,000 unique accountholders through reduced billing rates and an opportunity to forgive past utility debt. A study commissioned by the City found that 89% of participants successfully complete the UBR Program and had their debt forgiven.

**Distribution of Revenues by Type of Account**

The following table identifies the approximate percentage distribution of revenues by type of account for the years 2013 through 2022:

<b>City Service Area</b>						
<b>Year</b>	<b>Residential</b>			<b>Industrial and Commercial</b>	<b>Suburban Service Area</b>	<b>Other</b>
	<b>Metered</b>	<b>Non-Metered</b>	<b>Total</b>			
2013	19%	18%	37%	13%	46%	3%
2014	18	18	38	13	47	2
2015	21	17	37	13	47	2
2016	20	14	35	12	47	7
2017	22	14	36	13	49	2
2018	23	13	36	13	49	2
2019	23	13	36	13	49	2
2020	24	11	35	12	51	2
2021	23	13	36	12	50	2
2022	24	13	37	13	48	2

Source: City of Chicago, Department of Water Management.

## **Annual Budget Review and Implementation of Annual Budget**

The Department's annual budget is developed and implemented as part of the City's annual budget and is based upon an analysis of its historical Operation and Maintenance Costs. If the projected Gross Revenues are not sufficient to satisfy the Water System rate covenants, taking into account net transfers from the Residual Account, proposed rate increases are included in the Department's proposed annual budget. See "INTRODUCTION – Rate Covenant." In addition to or in lieu of rate increases, the City could take other steps to meet the Water System rate covenants. See "Historical and Projected Financial Operations" under this caption.

Once the Department has prepared and finalized its proposed annual budget, the Director of the Office of Budget and Management (the "Budget Director") considers the Department's proposed budget along with the proposed annual budgets recommended and submitted by all of the other departments and agencies whose budgets become part of the City's proposed annual budget. Following the Budget Director's approval, the budgets must be approved by the Mayor, the City Council's Committee on Budget and Governmental Operations and the City Council. After the City Council has approved the proposed annual budgets as the City's annual appropriation ordinance, the ordinance is forwarded to the Mayor for approval.

Should the Mayor veto the approved annual appropriation ordinance, the City Council may override the veto with a two-thirds vote.

The City Council may also refuse to approve the Mayor's proposed annual budget. In such a case, the appropriate process for passage of the City budget may have to be judicially determined. By law, the City's budget must be approved by December 31 of the year preceding the budget year. The City's 2023 budget was approved by the City Council on November 7, 2022.

During each year, the Budget Director uses an allotment system to manage each department's expenditures against its respective annual appropriation. The Budget Director requires departments to submit quarterly allotment budgets which the Budget Director, in turn, monitors. Should any department's expenditures exceed its receipt of revenues, the Budget Director, through the quarterly budget allotment procedure, has the authority to institute economy measures against such department to ensure that its expenditures do not exceed or outpace its revenue collection. During 2022, there were no such restrictions in the Department's quarterly expenditures.

### **Financial Policies**

The City has developed the following financial policies applicable to the Water System (the "Financial Policies"):

#### *Segregation of Funds*

Since 2019, the City has maintained all cash and investments of the Water Fund in separate bank accounts from the City's general accounts, including those of the Corporate Fund of the City. Gross Revenues of the Water System are deposited directly in the segregated accounts after they are allocated from the Unified Bill. As part of the Financial Policies, the City intends to continue maintaining all cash and investment of the Water Fund in segregated bank accounts.



### *Days Cash on Hand*

In addition to the requirement of the Indenture that the City maintain amounts in the Water Rate Stabilization Account equal to at least 90 Days' Cash On Hand, the City also intends as part of the Financial Policies to maintain Days' Cash On Hand of at least 270 days. For the purpose of calculating Days' Cash On Hand under the Financial Policies, the balance in the Water Rate Stabilization Account and the Residual Account will be included, along with any unrestricted cash and investments and any other restricted cash and investments available for the payment of debt service. The City calculates Water Fund Days' Cash On Hand as of December 31, 2021 to equal 497 days, and projects that Days' Cash On Hand for projection period will remain at comparable levels.

**The Financial Policies are not a legal requirement to which the City is bound but represent practices that, as of the date of this Official Statement, the City intends to follow in connection with the financial operations of the Water System. Subject to compliance by the City with the requirements of the Indenture, the Financial Policies may be changed, terminated in whole or in part, or disregarded in whole or in part at the City's discretion. No assurance can be given regarding future compliance by the City with the Financial Policies.**

### **Historical and Projected Financial Operations**

Following are the Water Fund's Statements of Operations as summarized from the Water Fund Annual Comprehensive Financial Reports for the years ended December 31, 2017 through 2021 ("Water Fund Financial Statements") together with projected financial operations and projected debt service coverage calculations for the years ending December 31, 2022 through December 31, 2026, reflecting the issuance of the Bonds and the application of the proceeds therefrom. The projected financial operations and debt service coverage calculations also include additional anticipated issuances of debt through the end of the projection period. As available, the City also intends to dedicate approximately half of net revenues after payment of debt service for Pay-Go to offset debt issuance in future years. The Water Fund Financial Statements for the year ended December 31, 2022 are not expected to be published until June 30, 2023. Financial results for the fiscal year ended December 31, 2022 are categorized as projected for the purposes of this section and should not be considered to be reflective of actual financial results for the period.

Based on the projected financial operations described below, the City projects that it can fund its Capital Improvement Program and Public-side LSLR and maintain comparable Second Lien debt service coverages and Days' Cash On Hand levels while increasing water rates based on the annual change in CPI or the Cost-of-Service Water Rate.

The Water Fund's operating revenues for 2021 increased by approximately \$40 million compared to the prior year operating revenues. This increase of 5.4% is primarily due to decreases in provision for doubtful accounts (following a one-time increase in 2020 related to write-offs of exempt accounts), increased suburban consumption and a marginal increase in the water rate. As available, the City intends to dedicate approximately half of Net Revenues remaining after the payment of debt service as permitted by the Master Indenture for Pay-Go to reduce debt issuance in future years.

The Water Fund's operating expenses before depreciation and amortization for 2021 increased approximately \$16 million from the year ended 2020 due primarily to an increase in pension expenses. Operating expenses exclusive of pension expense increased by 1.8 million in 2021, primarily due to increases in power and pumping costs, administrative costs, offset by decreases in general fund reimbursements.

The Water Fund's estimated operating revenues for 2022 increased by approximately \$20 million compared to the prior year operating revenues. This increase of 4.26% is reflective of a water rate increase of 5% on June 1, 2022, based on 2021 growth in CPI subject to a 5% maximum increase, partially offset by decreases in consumption due to water conservation efforts, including increased meter installation. See "INVESTMENT CONSIDERATIONS – Water Conservation."

Projected operating revenues in 2023 through 2026 are estimated to increase based on projected inflationary trends as published by the Federal Reserve. Future rate increases are projected to be offset by decreases in consumption due to water conservation efforts, including increased meter installation.

Projected operating expenses (excluding pension contributions) are based on projected inflationary trends as published by the Federal Reserve. Such projected operating expenses reflect an increase in each year based on growth in indirect costs being charged to the Water Fund as reimbursements to the General Fund. The methodology for charging these indirect costs to the Water Fund is prepared by a third party and is consistent with generally accepted accounting principles.

Direct pension contributions are budgeted at \$77.3 million and \$79.2 million in 2022 and 2023. Indirect pension contributions allocable to the Water Fund are budgeted at \$20.8 million and \$23.3 million in 2022 and 2023, respectively. Pursuant to the Pension Funding Policy, the City budgeted the 2023 Advance Pension Contribution, of which the Water Fund's allocable share was \$13.0 million. Future pension contributions are projected to grow from 2024 to 2026 based on the City's internal projections incorporating actual pension fund returns of 12.1% on average for 2022 and assumed 0.0% returns in 2023.

In addition to rate increases, the City could achieve compliance with its Rate Covenant (see "INTRODUCTION – Rate Covenant") in some other manner. Such other manner could include any combination of rate increases, decreases in operating expenses, changes in its Capital Improvement Program or in the timing and amounts of future borrowings or changes in net transfer to (from) the Residual Account.

The City has prepared the projections discussed herein and summarized in the tables below. The City believes that the underlying assumptions provide a reasonable basis for the projections, and that the projections present, to the best of the City's knowledge and belief, the City's expected course of action. However, some of the assumptions upon which the projections are based inevitably will not materialize and unanticipated events and circumstances may occur. The management of the City has prepared the projected financial information set forth below to present the expected financial performance of the Water System.

The accompanying prospective financial information was not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to projected financial information, but, in the view of the City's management, was prepared on a reasonable basis, reflects its best currently available estimates and judgments, and presents, to the best of management's knowledge and belief, the expected course of action and the expected future financial performance of the Water System. Accordingly, these projections are not fact and should not be relied on as being necessarily indicative of future results. ***Readers of this Official Statement are cautioned not to place undue reliance on the projected financial operations of the Water System which are contained herein.***

Neither the City's independent auditors, nor any other independent accountants, have compiled, examined, or performed any procedures with respect to the prospective financial information contained herein, nor have they expressed any opinion or any other form of assurance on such information or its

achievability. Such parties assume no responsibility for, and disclaim any association with, the prospective financial information.

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**CITY OF CHICAGO WATER SYSTEM Historical and Projected Financial Operations (Dollars in Thousands)<sup>(1)</sup>**

	Actual					Projected				
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Operating Revenues</b>										
Water Sales <sup>(2)(3)</sup>	\$749,847	\$754,751	\$737,866	\$743,771	\$763,802	\$797,144	\$808,994	\$846,096	\$865,078	\$881,227
Less: Provision for doubtful accounts <sup>(4)</sup>	(20,203)	(8,205)	(20,370)	(29,461)	(15,212)	(15,516)	(15,827)	(16,143)	(16,466)	(16,795)
Other operating revenues	29,370	27,414	26,882	22,268	27,135	27,135	27,135	27,135	27,135	27,135
<b>Total Operating Revenues</b>	<b>\$759,014</b>	<b>\$773,960</b>	<b>\$744,378</b>	<b>\$736,578</b>	<b>\$775,725</b>	<b>\$808,763</b>	<b>\$820,303</b>	<b>\$857,088</b>	<b>\$875,747</b>	<b>\$891,566</b>
<b>Operating Expenses<sup>(5)</sup></b>										
Source of supply	130	169	369	200	102	107	112	118	121	124
Power and pumping	41,443	41,108	42,465	40,705	45,167	47,425	49,797	52,037	53,651	54,885
Purification	60,476	62,858	67,790	61,778	62,334	65,451	68,723	71,816	74,042	75,745
Transmission and distribution	39,610	59,714	71,810	71,718	74,791	78,531	82,457	86,168	88,839	90,882
Customer accounting and collection	18,167	22,103	27,178	26,991	26,521	27,847	29,239	30,555	31,502	32,227
Administrative and general	13,567	12,958	12,990	13,913	14,933	15,680	16,464	17,204	17,738	18,146
Central Services and General Fund Reimbursement	121,739	126,995	124,049	139,839	133,128	117,919	123,814	129,386	133,397	136,465
Indirect Pension Expense						23,258	23,694	25,272	25,660	25,698
Pension Expense	107,095	85,451	70,335	(47,881)	(33,871)	77,322	79,156	84,576	86,875	87,586
Advance Pension Expense	-	-	-	-	-	-	12,998	18,651	18,018	16,851
<b>Total Operating Expenses</b>	<b>\$402,227</b>	<b>\$411,356</b>	<b>\$416,986</b>	<b>\$307,263</b>	<b>\$323,105</b>	<b>\$453,539</b>	<b>\$486,455</b>	<b>\$515,783</b>	<b>\$529,843</b>	<b>\$538,608</b>
Interest Income (other than from construction accounts) [Non-operating Revenues] <sup>(6)</sup>	10,248	5,072	21,035	17,033	1,734	11,024	11,024	11,024	11,024	11,024
<b>NET REVENUES</b>	<b>\$367,035</b>	<b>\$367,676</b>	<b>\$348,427</b>	<b>\$446,348</b>	<b>\$454,354</b>	<b>\$366,249</b>	<b>\$344,872</b>	<b>\$352,330</b>	<b>\$356,929</b>	<b>\$363,982</b>
Plus: Pension expense other than contribution <sup>(7)</sup>	82,683	53,316	30,260	(92,258)	(84,160)	-	-	-	-	-
Other available funds <sup>(8)</sup>	515,703	451,775	444,985	467,076	423,975	461,115	461,115	461,115	461,115	461,115
<b>Water Rate Stabilization Account Year-End Balance</b>	<b>90,500</b>	<b>89,400</b>	<b>91,200</b>	<b>93,200</b>	<b>91,700</b>	<b>101,816</b>	<b>113,385</b>	<b>121,614</b>	<b>128,946</b>	<b>132,461</b>
<b>Net Revenue Available for Bonds</b>	<b>\$965,421</b>	<b>\$872,767</b>	<b>\$823,672</b>	<b>\$821,166</b>	<b>\$794,169</b>	<b>\$827,362</b>	<b>\$805,987</b>	<b>\$813,444</b>	<b>\$818,043</b>	<b>\$825,097</b>
<b>Debt Service Requirements:<sup>(9)(10)</sup></b>										
Senior Lien Debt Service <sup>(11)</sup>	\$15,590	\$15,595	\$7,600							
Existing and Projected Second Lien Debt Service	\$178,700	\$180,900	\$183,473	\$178,607	\$178,616	\$178,520	\$191,186	\$196,481	\$199,798	\$204,798
<b>Second Lien Debt Service Coverage (1.10 required)<sup>(12)</sup></b>	<b>4.97x</b>	<b>4.44x</b>	<b>4.31x</b>	<b>4.60x</b>	<b>4.45x</b>	<b>4.63x</b>	<b>4.22x</b>	<b>4.14x</b>	<b>4.09x</b>	<b>4.03x</b>
IEPA Subordinate Lien Debt Service	\$13,306	\$21,266	\$28,716	\$33,333	\$38,300	\$37,279	\$37,103	\$37,103	\$37,103	\$36,927
<b>Combined Second &amp; Sub. Lien Debt Service</b>	<b>\$207,596</b>	<b>\$217,761</b>	<b>\$219,789</b>	<b>\$211,940</b>	<b>\$216,916</b>	<b>\$215,799</b>	<b>\$228,289</b>	<b>\$233,584</b>	<b>\$236,901</b>	<b>\$241,725</b>
<b>Combined Second &amp; Sub. Lien Debt Service Coverage (1.15 required)</b>	<b>4.65x</b>	<b>4.01x</b>	<b>3.75x</b>	<b>3.87x</b>	<b>3.66x</b>	<b>3.83x</b>	<b>3.53x</b>	<b>3.48x</b>	<b>3.45x</b>	<b>3.41x</b>

Source: Actual - City of Chicago, Water Fund Financial Statements; Projected - City of Chicago, Department of Water Management, Department of Finance and Office of Budget and Management.

- (1) Totals may not add due to rounding.
- (2) 2022 water sales are preliminarily estimated to grow by 4.4%. Projections include rate increases based on projected inflationary trends as published by the Federal Reserve. In addition to projected rate increases, 2022-26 Water Sales also include projected consumption declines based on CMAP data.
- (3) Projected annual Water Sales reflect gross billings and not collections, which is in accordance with generally accepted accounting principles. Prior year annual collections for the prior five years have averaged 97% of gross billings.
- (4) Projected provision for bad debt is preliminarily estimated to increase by 2% yearly in 2022 through 2026.
- (5) Non-pension operating expenditure growth is projected to increase based on projected inflationary trends as published by the Federal Reserve.
- (6) Amounts in 2022-2026 assumed to be five-year average of prior audited results.
- (7) Of the (\$33.9) million of pension expense for 2021, \$50.3 million is the portion of the City's pension contribution payable in 2021 to the pension funds and allocable to the Water Fund. The remaining portion of the pension expense for 2021, (\$84.2)

million is recognized on the income statement of the Water Fund for 2021 pursuant to GASB 68 but is not due and payable by the City during 2021; accordingly, that portion is not included in Operating Expenses for purposes of calculation of the debt service coverage ratio.

- (8) As provided in the Master Indenture, Gross Revenues remaining in any period after providing sufficient funds for Operations and Maintenance Costs, for paying required debt service on all bonds and notes secured by Water System revenues, for paying any required amounts into any other accounts established for any bonds or notes secured by Water System revenues and to make any deposits into the Water Rate Stabilization Account ("Other Available Funds"), can be applied to debt service for any future period. Other Available Funds is equal to total current unrestricted assets net of total current liabilities included in the annual Basic Financial Statements - Statements of Net Position as of December 31 of the prior period. From 2023 through 2026, Other Available Funds are projected to be \$461.1 million per year.
- (9) Reflects the issuance of the Bonds and the refunding of the Refunded Bonds. Reflects assumed future refundings of callable bonds with certain interest rate assumptions. Reflects assumed future issuance of bonds, including the WIFIA Loan, to fund capital expenditures. There can be no assurance that any future refundings or capital financings will be completed when assumed, or at all. Interest for each year also includes the full amount of interest payable on the City's Series 2010B Second Lien Bonds without adjustment for certain direct payment subsidies expected by the City to be received from the U.S. Treasury.
- (10) Principal and interest for each year includes amounts payable on the City's water revenue bonds on May 1 of that year and November 1 of the following year.
- (11) The Senior Lien is now closed, with the City having covenanted under the Master Trust Indenture not to issue any obligations with a claim to Net Revenues of the Water System senior to that of the Second Lien Water Revenue Bonds, including the Series 2023 Bonds.
- (12) For years 2017 through 2019, includes debt service on then outstanding Senior Lien Bonds.

The amounts of annual net water sales and cash collected from the then current and prior years' billings are included in the following table:

**NET WATER SALES AND CASH COLLECTIONS**

<b>Year</b>	<b>Net Water Sales (\$)<sup>(1)</sup></b>	<b>Cash Collected During Year for Current and Prior Years' Sales (\$)</b>	<b>Percentage of Sales Collected</b>
2013	608,983,431	587,982,350	97%
2014	692,966,242	660,026,305	95%
2015	773,029,703	749,777,215	97%
2016	811,045,900	749,581,522	92%
2017	750,892,971	749,581,522	96%
2018	760,437,497	750,361,496	99%
2019	745,092,361	726,431,575	97%
2020	732,111,077	717,068,450	98%
2021	764,091,701	747,363,111	98%
2022	793,579,454	757,748,653	95%

Source: City of Chicago, Department of Water Management. Restated historical figures 2013-2016.

<sup>(1)</sup> Actual amounts billed during calendar year differs from Water Fund Financial Statements which include charges accrued for calendar year regardless of year in which billed. Collections reflect the amount of water collection that was submitted, which differs from Water Fund Financial Statements.

**Pension Costs**

*Determination of Pension Contributions.* Pension costs paid out of the Water Fund constitute Operation and Maintenance Costs for purposes of determining Net Revenues and compliance with the City's covenants (including the Rate Covenant) under the Indenture. See "INTRODUCTION – Rate Covenant."

The City participates in four single-employer defined-benefit pension plans for City employees: the Municipal Employees' Annuity and Benefit Fund of Chicago ("MEABF"), the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago ("LABF," and together with MEABF, the "Municipal and Laborers' Funds"), the Policemen's Annuity and Benefit Fund ("PABF"), and the Firemen's Annuity and Benefit Fund ("FABF," and together with PABF, the "Public Safety Funds," which, together with the Municipal and Laborers' Funds, are referred to herein as the "Retirement Funds"). Water System employees participate in the Municipal and Laborers' Funds.

Certain of the comprehensive annual financial reports of the Retirement Funds and certain of the actuarial valuations of the Retirement Funds may be obtained by contacting the Retirement Funds. Certain of these reports may also be available on the Retirement Funds' websites ([www.meabf.org](http://www.meabf.org); [www.labfchicago.org](http://www.labfchicago.org); [www.chipabf.org](http://www.chipabf.org) and [www.fabf.org](http://www.fabf.org)); provided, however, that the contents of these reports and of the Retirement Funds' websites are not incorporated herein by such reference.

Members of each Retirement Fund are eligible (individually, an "Eligible Member," and collectively, "Eligible Members") for an annual annuity payment (the "Annuity Benefits") if they meet certain age, years of service and prior service credit requirements (the "Eligibility Factors"). Benefits to each Eligible Member are statutorily established based on a combination of the Eligibility Factors and the Eligible Member's average annual salary for certain years prior to retirement (the "Annuity Factors").

Annuity Benefits for each of the Retirement Funds are funded from three sources: (i) contributions from the City (the "City Contributions") which are funded from (a) the proceeds of a

property tax levy (the “Pension Levy”) on all taxable property located within the City or (b) other available funds including payments from the Department on behalf of Water System employees (“Other Available Funds”), (ii) contributions from Eligible Members (the “Employee Contributions,” and together with the City Contributions, the “Contributions”), and (iii) investment returns. The Department has historically contributed its pro rata share of City Contributions to the Retirement Systems (the “Department Portion”) based on the Annuity Factors for the number of Water System employees who are Eligible Members. See APPENDIX C – “CITY OF CHICAGO, ILLINOIS WATER FUND ANNUAL COMPREHENSIVE FINANCIAL REPORT FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020, REQUIRED SUPPLEMENTARY INFORMATION, ADDITIONAL INFORMATION, AND INDEPENDENT AUDITOR’S REPORT – Notes to Basic Financial Statements – 6. Pension Plans.” Pension liabilities are not recorded at the fund level for the Water Fund.

The City Contributions and Employee Contributions are each established by the Illinois Pension Code (the “Pension Code”). Historically, the Contributions required under the Pension Code do not relate to, and in prior years were substantially less than, the contribution amounts that would have been required if the Retirement Funds were funded based on actuarial determinations of the contribution amounts necessary to fully fund the Annuity Benefits to Eligible Members of each Retirement Fund over an extended period. See “INVESTMENT CONSIDERATIONS – Unfunded Pensions” herein. In an effort to improve the funded status of the Retirement Funds, the Illinois General Assembly passed Public Act 96-1495 (“P.A. 96-1495”), which modified provisions of the Pension Code with respect to PABF and FABF, and Public Act 100-23 (“P.A. 100-23”) which modified provisions of the Pension Code with respect to MEABF and LABF.

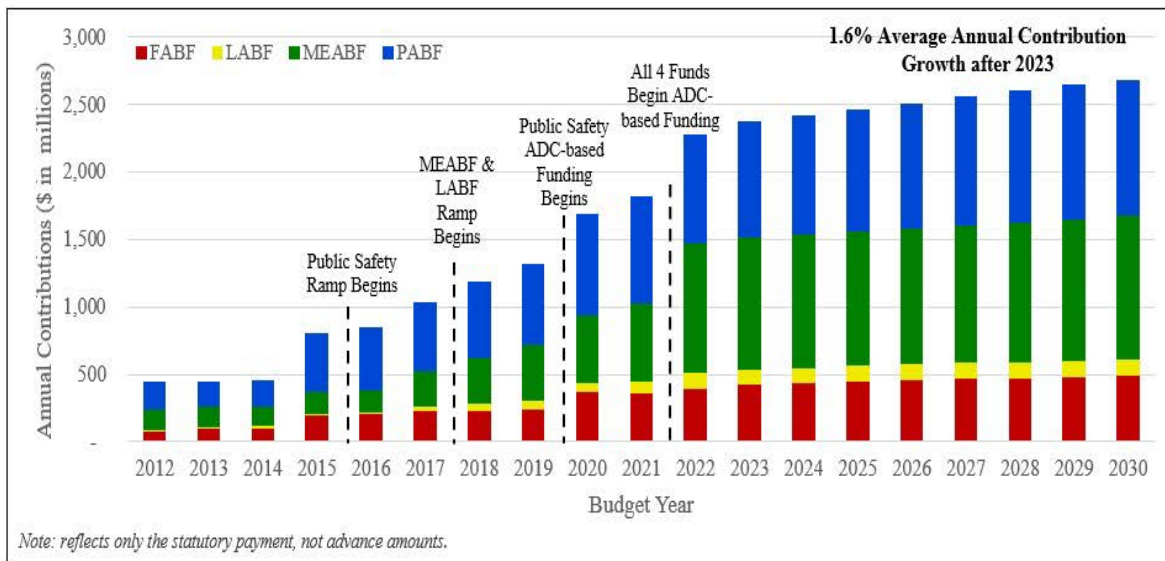
P.A. 96-1495, as later amended by Public Act 99-506, provides for the City to contribute the actuarially determined amounts necessary to achieve a 90% funded ratio in the Public Safety Funds by 2055, but made no changes to the Annuity Benefits for Eligible Employees hired before January 1, 2011 and established Annuity Benefits for Eligible Members hired on or after January 1, 2011 based on the Annuity Factors, but with the average annual salary capped at a certain amount, and the annual increases to the Annuity Benefits tied to the lesser of 3% or the consumer price index. Additionally, for Eligible Members hired on or after January 1, 2011, P.A. 96-1495 reduced a survivor’s Annuity Benefit equal to 2/3 of the Annuity Benefits that the deceased Eligible Member was receiving at the time of his or her death.

The Pension Code establishes Annuity Benefits for Eligible Members of the Municipal and Laborers’ Funds hired prior to January 1, 2011 based on the Annuity Factors, subject to 3% automatic annual increases after the Eligible Members’ first full year of retirement and Annuity Benefits for Eligible Members hired on or after January 1, 2011 based on the Annuity Factors, but with the average annual salary capped at a certain amount, and the annual increases to the Annuity Benefits are tied to the consumer price index. Further, the Pension Code establishes the Employee Contribution for MEABF and LABF Eligible Members hired prior to January 1, 2017 at 8.5% of the salary of each employee on an annual basis. Pursuant to P.A. 100-23, MEABF and LABF Eligible Members hired on or after January 1, 2017 (“*New Members*”) will contribute 11.5% of their salaries to their respective Retirement Funds and will be eligible for benefits at age 65 (as opposed to age 67 for Eligible Members hired between January 1, 2011 and January 1, 2017) (“*Tier II Member*”). In addition, Tier II Members of MEABF and LABF will be eligible to receive benefits at age 65 provided that such Tier II Members agree to contribute an additional 3% of their salaries to their respective Retirement Funds.

P.A. 100-23 requires that the City contribute the actuarially determined amounts required to achieve a 90% funded ratio in each of MEABF and LABF by 2058.

The City increased aggregate pension contributions by \$2.2 billion from 2014 to the 2023 budgeted contributions, and by \$1.3 billion from 2019 to 2023 budgeted contributions, including \$242 million contributed under the Pension Funding Policy. Aggregate contributions are expected to grow approximately 1.6% annually after 2023.

### HISTORICAL AND PROJECTED BUDGETED PENSION CONTRIBUTIONS



#### 2023 Budgeted Contributions

The City’s Fiscal Year 2023 budget includes the following contributions to the Retirement Funds (as indicated by total annual contribution and the Water Fund’s proportional share): (i) \$1,077.7 million for MEABF, of which \$70.1 million, or approximately 6.5%, is the Water Fund’s proportional share; and (ii) \$124.1 million for LABF, of which \$22.0 million, or approximately 17.8%, is the Water Fund’s proportional share. In addition, the 2023 Water Fund budget includes \$23.7 million for indirect pension contributions chargeable to the Water Fund, and \$13.0 million pursuant to the Pension Funding Policy. A small portion of the Water Fund indirect pension contribution is allocated to FABF and PABF.

#### New Pension Funding Policy

Contemporaneously with the 2023 Budget, the City published a new debt and pension management policy (the “**Pension Funding Policy**”) that states: “Starting in fiscal year 2023, the City will annually budget for an advance pension contribution which, in addition to the statutorily required contribution, and in the determination of the Chief Financial Officer, will not increase the total net pension liability of the City’s four pension funds based on best efforts projections and information available at the time of budget. This total net pension liability calculation will be based on the GASB 67/68 calculation of net pension liability included annually in the City’s Annual Comprehensive Financial Report and will include components of said calculation including interest cost derived from unfunded liability, normal cost, administrative costs, employee contributions and market value of the assets of the fund.” It also provides that the advance pension contribution shall be paid in the first business day of the year in which such contributions are budgeted.

The first of these advance pension contributions, for \$242.0 million, is included in the 2023 Budget adopted by the City Council on November 7, 2022 (the “**2023 Advance Pension Contribution**”).



The 2023 Advance Pension Contribution, in addition to preventing an increase in the City’s net pension liability, also avoids an estimated \$30 million in market losses due to asset liquidations that would otherwise be required to make benefit payments. In accordance with the Pension Funding Policy, the 2023 Advance Pension Contribution was paid on the first business day of the 2023 fiscal year (January 3, 2023). The 2023 Advance Pension Contribution is included in the figures cited above under “2023 Budgeted Contributions.” As part of the Pension Funding Policy, the Water Fund pays its proportionate share of the Advance Pension Contribution. For Budget Year 2023, that payment was approximately \$10.9 million for MEABF and \$2.1 million for LABF.

**2023 ADVANCE PENSION CONTRIBUTION BY RETIREMENT FUND  
(\$ IN MILLIONS)**

Retirement Fund	Amount
MEABF	\$101.6
LABF	12.1
PABF	89.5
FABF	38.7
Total:	\$242.0

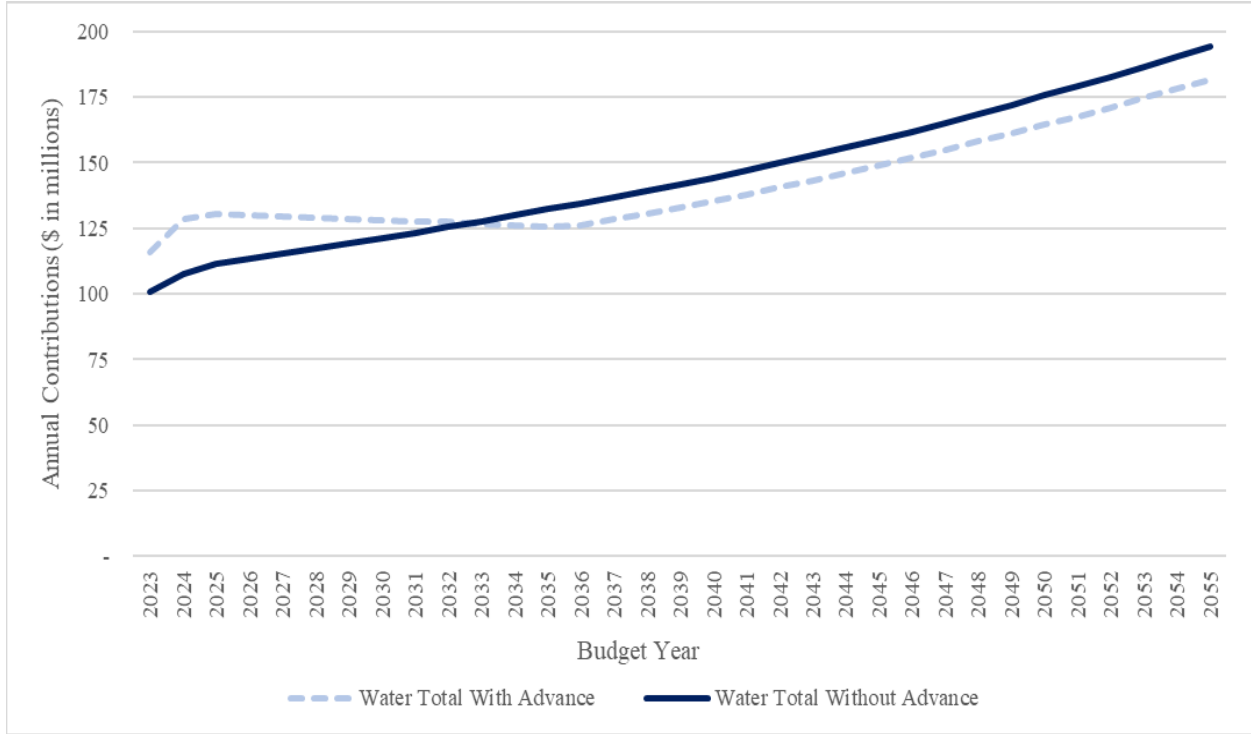
The City intends to include the investment losses and gains in line with the current practices for the statutory contribution. In 2022, a 12.1% investment loss is projected to increase the 2024 pension contribution by cost \$141 million and such losses may be included in the Fiscal Year 2024 Budget and are included in the current City’s out-year financial planning. The City projects that the pension contribution that will be included as part of the 2024 Budget will increase by \$174 million over 2023, including a \$33 million increase in the advance pension contributions calculated based on the Pension Funding Policy.

Under the Pension Funding Policy, the City projects that it may contribute advance funding amounts of \$1.2 billion through 2030, resulting in reduced required contributions of \$3.8 billion from 2031 to 2058, resulting in a net reduction in total future pension contributions of \$2.6 billion overall and of \$129 million by the Water Fund. These advance contributions to all four funds will stabilize the overall level of the City’s total net pension liability and prevent significant liquidation losses.

**The Pension Funding Policy as described herein is not a legal requirement to which the City is bound but represents practices that, as of the date of this Official Statement, the City intends to follow in connection with advance pension contributions. Subject to compliance by the City with applicable requirements of the Indenture and with applicable statutory requirements, the Pension Funding Policy may be changed, terminated in whole or in part, or disregarded in whole or in part as the City’s discretion. In addition, any advance pension contributions in 2024 and later years contemplated by the Pension Funding Policy would be subject to approval and appropriation by the City Council. No assurance can be given regarding future compliance by the City with the Pension Funding Policy.**

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**PROJECTED WATER CONTRIBUTIONS UNDER NEW PENSION FUNDING POLICY**



During calendar year 2022, due to the negative investment returns experienced by the Retirement Funds combined with delays in the collection and distribution of the Pension Levy by the County, each of the Retirement Funds considered the liquidation of assets in order to make benefit payments to members. To avoid such asset sales, beginning in September 2022, the City began making monthly advance contributions to each of the Retirement Funds. Such advance contributions were made by the City in each of September, October and November 2022 (except that the City did not advance funds to LABF in September 2022) in a total amount of \$512.7 million. The advances to PABF (in an aggregate amount of \$220.0 million), \$30.1 million of the total FABF advances (the aggregate amount of which were \$77.7 million), and \$25.4 million of the total LABF advances (the aggregate amount of which were \$28.0 million) were advances on the City’s required contributions to such Retirement Funds for Fiscal Year 2022. The City will reimburse itself by the amount of such advances from the proceeds of the Pension Levy upon disbursement thereof from the Cook County Treasurer. The balance of the LABF advances (\$2.6 million), the balance of the FABF advances (\$47.6 million) and all of the MEABF advances (in the amount of \$187.0 million) represent advances of the portion of the City’s Fiscal Year 2023 contribution to such Retirement Funds funded from Other Available Funds (as defined herein), payable in February 2023. None of the advance pension contributions described in this paragraph are part of or related to the Pension Funding Policy or the 2023 Advance Pension Contribution, both of which are described in the preceding paragraphs.

**COVID-19 Pandemic**

The COVID-19 pandemic has had certain economic and operational impacts on governmental entities, including the City and the Water System. Notwithstanding such impacts, the COVID-19 pandemic did not have a material adverse impact on the revenues and expenses of the Water Fund and the operations of the Water System for actual fiscal years 2020 and 2021 and projected fiscal years 2022 –

2026. See “FINANCIAL OPERATIONS – Historical and Projected Financial Operations.” Further, the City continues to experience a robust economic recovery from the COVID-19 pandemic (see APPENDIX E – “INFORMATION REGARDING THE CITY OF CHICAGO ECONOMY AND DEMOGRAPHICS”) and the City does not expect that the COVID-19 pandemic will have any material adverse impact on the security for the Bonds, the Second Lien Bond Revenues or the ability of the City to pay the debt service on the Bonds.

## **INVESTMENT CONSIDERATIONS**

*The following discussion of investment considerations should be reviewed by prospective investors prior to purchasing the Bonds. Any one or more of the investment considerations discussed herein could lead to a decrease in the market value and the liquidity of the Bonds or, ultimately, a payment default on the Bonds. There can be no assurance that other factors not discussed herein will not become material in the future.*

### **Effect of Potential Future Ratings Downgrades**

The City does not anticipate that any potential credit downgrades would affect collection or availability of Net Revenues in any material respect. However, such events could have an adverse effect on the Water System because the City funds ongoing capital improvement projects to the Water System, in part, through the sale of indebtedness of the Water System. Downgrades could increase the cost, or decrease the availability, or both, of such borrowing. If this occurred, additional pressure may be placed on Water System rates or capital funding. Additionally, ratings downgrades may have an adverse effect on the market value or liquidity of the Bonds.

### **Unfunded Pensions**

The Retirement Funds have significant unfunded liabilities and low funding ratios. The City’s required contributions to the Retirement Funds are projected to increase in future years as set forth under “FINANCIAL OPERATIONS – Pension Costs.” Future required contribution increases may require the City to increase its revenues, reduce its expenditures, or some combination thereof, which may impact the services provided by the City or limit the City’s ability to generate additional revenues in the future.

### **Environmental Regulations**

As described herein under “WATER SYSTEM – Quality of Water Supplied,” the City is subject to state and federal environmental laws and regulations applicable to the Water System. These laws and regulations are subject to change, and the City may be required to expend substantial funds to meet the requirements of such changing laws and regulations in the future. Failure to comply with these laws and regulations may result in the imposition of administrative, civil, and criminal penalties, or the imposition of an injunction requiring the City to take or refrain from taking certain actions. While the Department has budgeted for future capital and operating expenditures to comply with these laws and regulations, it is possible that new or stricter standards could be imposed that will require additional capital expenditures or raise operating costs.

### **Operational and Cybersecurity of the Water System**

#### *Operational Security of the Water System*

The damage to the Water System resulting from vandalism, sabotage, natural disasters or terrorist activities may adversely affect the operations and finances of the Water System. While the Department

maintains robust procedures and capabilities to ensure the physical security of the Water System including (i) collaboration with the City's Office of Emergency Management and Communications (OEMC), which provides the Department with access to the citywide network of video cameras to allow 24/7 surveillance of the Water System, (ii) as part of the Department's ongoing partnership with law enforcement agencies, including the Chicago Police Department, the US Coast Guard, the FBI and the Department of Homeland Security, and (iii) elevated enhancement of physical security of the Water System and water access points in advance of large-scale public events and/or in response to any intelligence received indicating a potential threat, there can be no complete assurance that the City's comprehensive security, emergency preparedness and response plans will completely prevent or mitigate all such potential damage, or that the costs of maintaining such security measures will not be greater than currently anticipated.

#### *Administrative and Financial Systems*

The Department relies on information technology systems with respect to customer service, administration, billing, and accounting. In addition, the Department relies on these systems to track utility assets and to manage maintenance and construction projects, materials and supplies. A loss of these systems, or major problems with the operation of these systems, could have a material adverse effect on the financial condition and results of operations of the Water System. Information technology systems may be vulnerable to damage or interruption from the following types of cybersecurity attacks or other events:

- power loss, computer systems failures, and internet, telecommunications or data network failures;
- operator negligence or improper operation by, or supervision of, employees;
- physical and electronic loss of data;
- computer viruses, cybersecurity attacks, intentional security breaches, hacking, denial of service actions, misappropriation of data and similar events;
- difficulties in the implementation of upgrades or modification to information technology systems; and

City Computer networks and systems provide support to the Water Department departmental operations and constituent services by collecting and storing sensitive data, including intellectual property, security information, proprietary business process information, information applying to suppliers and business partners and personally identifiable information of customers, constituents and employees. The secure processing, maintenance and transmission of this information is critical to departmental operations, the provision of citizen services and the Water System finances through the collection of water fees. Increasingly, governmental entities are being targeted by cyberattacks seeking to obtain confidential data or disrupt critical services or financial operations. A rapidly changing cyber risk landscape may introduce new vulnerabilities that attackers and/or hackers can exploit in attempts to effect breaches or service disruptions. Employee error and/or malfeasance may also contribute to data loss or other system disruptions. Any such breach could compromise networks and the confidentiality, integrity and availability of systems and the information stored there. The potential disruption, access, modification, disclosure or destruction of data could result in interruption of the efficiency of Water System financial management, initiation of legal claims or proceedings, liability under laws that protect the privacy of personal information, regulatory penalties, disruptions in operations and the services

provided and the loss of confidence in Water System operations, ultimately adversely affecting Water System revenues.

The City's Department of Assets, Information, and Services has developed a set of information technology and security policies, in an effort to protect the confidentiality, integrity and availability of the City's information technology data and assets. These policies are applicable to all City information technology systems and networks, those entrusted to third parties, City employees and others, including but not limited to contractors, vendors and consultants.

No assurance can be given that any cyberattacks, if successful, will not have a material adverse effect on the administrative operations or financial condition of the Water System.

Although the Department does not believe that its systems are at a materially greater risk of cybersecurity attacks than other similar utilities, its information technology systems may be vulnerable to damage or interruption from the types of cybersecurity attacks or other events listed above or other similar actions, and such incidents or other events may be unprecedented and may go undetected for a period of time.

The City, including the Department, maintains ongoing communication and cooperation with the FBI and Department of Homeland Security's Cybersecurity & Infrastructure Security Agency (CISA) to review and improve upon protocols to protect the Water System against cyber and/or physical intrusions. As an example, in July 2022, the Department and CISA conducted a "Cyber Tabletop Exercise" at the City's Jardine Plant to: 1) assess information sharing processes with internal and external stakeholders; 2) examine the effectiveness of the City's plans and processes protecting its water system; 3) evaluate the City's coordination efforts to respond to and recover from cybersecurity incidents; and 4) explore processes for requesting additional incident response resources.

#### *Isolated System Infrastructure*

The Department's operational systems at its two water purification facilities are completely isolated from the internet. There is no way to log in externally to the Department's operational systems, which can only be controlled by operators physically located at the Department's facilities. This isolation provides even greater protection against potential cyber-attacks. Finally, even in the unlikely event of a complete IT failure of these operational systems, the Department has the capability to manually maintain 100% operational capability at both of its water purification plants.

#### **Water Conservation**

Decreased customer water consumption as a result of water conservation efforts may adversely affect demand for water services and may reduce revenues and earnings. There may be declines in water usage per customer as a result of an increase in conservation awareness, and the structural impact of an increased use of more efficient plumbing fixtures and appliances. Difficulty obtaining future rate increases to offset decreased customer water consumption to cover investments and expenses, may adversely affect the business, financial condition, and results of operations of the Department.

#### **Limited Obligations**

The Bonds are limited obligations of the City payable solely from Net Revenues. The Bonds are not secured by a lien upon any physical properties of the Water System, nor has the City established a debt reserve fund or obtained any third-party credit enhancement, credit support, surety bond or insurance with respect to the Bonds.

## **Issuance of Additional Bonds**

Subject to certain financial tests and limitations contained in the Indenture, the City may issue Water Revenue Bonds senior to or on a parity with the Bonds. The debt service requirements for the payment of any such additional Water Revenue Bonds may be substantial.

The financial tests that must be satisfied to permit the issuance of additional bonds are based on certain assumptions concerning future revenue and debt service requirements. Actual debt service requirements may exceed assumed requirements and result in lower debt service coverage on the Bonds.

## **No Assurance of Secondary Market**

There can be no assurances that a secondary market for the Bonds will be established, maintained or functioning. Accordingly, each purchaser should expect to bear the risk of the investment represented by the Bonds to maturity.

## **Adverse Change in Laws**

There are a variety of State and federal laws, regulations and constitutional provisions that apply to the City's ability to raise taxes, fund its pension obligations or to reorganize its debts. There is no assurance that there will not be any change in, interpretation of, or addition to such applicable laws, regulations and provisions. Any such change, interpretation or addition may have a material adverse effect, either directly or indirectly, on the City or the taxing authority of the City, which could materially adversely affect the City's operations or financial condition.

Interest on the Bonds could become subject to federal and/or State income tax as a result of changes in tax laws. For example, recent legislative tax proposals in the U.S. Congress would eliminate, reduce or otherwise alter the tax benefits currently provided to certain owners of state and local government bonds. The Bonds will not be subject to mandatory redemption, and the interest rates on the Bonds will not be subject to adjustment, in the event of any change in the tax treatment of interest on the Bonds. In such event, the market value and of and ability of owners to sell the Bonds could be adversely affected. No assurance can be provided, and no predictions can be made, as to whether there will be any change in tax laws relating to state and local government bonds, including the Bonds, or to what effect.

Investors in the Bonds should consult their own financial and tax advisors in connection with their purchase of the Bonds.

## **Municipal Bankruptcy**

Municipalities, such as the City, cannot file for protection under the U.S. Bankruptcy Code unless specifically authorized to be a debtor by state law or by a governmental officer or organization empowered by state law to authorize such entity to be a debtor in a bankruptcy proceeding. State law does not currently permit municipalities to be a debtor in a bankruptcy proceeding. From time to time, legislation has been introduced in the Illinois General Assembly which, if enacted, would permit Illinois municipalities to be debtors in bankruptcy. The City is unable to predict whether the Illinois General Assembly will adopt any such legislation or the form of such legislation if enacted.

In the event of a change in State law to provide that the City is eligible to be a debtor in bankruptcy, and that authority is acted upon, there is no guarantee that the bankruptcy court would consider the Bondholders to have a secured claim under the Bankruptcy Code with respect to Net Revenues that are derived from the remittance of Gross Revenues into the Water Fund or amounts on

deposit in any Second Lien Construction Accounts. The Water Fund is not held by the Trustee and is not subject to a statutory lien in favor of the Bondholders. In addition, the Net Revenues may not be “special revenues” as defined in the Bankruptcy Code.

### **Uncertain Enforcement Remedies**

The remedies available to bondholders upon nonpayment of principal of or interest on the Bonds are uncertain and, in many respects, dependent upon discretionary judicial actions. See APPENDIX B – “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Defaults and Remedies.”

The Indenture does not contain a provision allowing for the acceleration of the Bonds in the event of a default in the payment of principal of and interest on the Bonds when due.

### **Force Majeure Events**

Certain unanticipated events beyond the City’s control, such as the COVID-19 pandemic, could have a material adverse effect on the Department’s and the City’s operations and financial conditions if they were to occur. These events include fire, flood, earthquake, epidemic, other pandemic, adverse health conditions or other unavoidable casualties or acts of God, freight embargo, labor strikes or work stoppages, civil commotion, new acts of war or escalation of existing war conditions, sabotage, terrorism or enemy action, pollution, unknown subsurface or concealed conditions affecting the environment, and any similar causes. No assurance can be provided that such events will not occur, and, if any such events were to occur, the effect of such event or events on the Department’s and the City’s operations and financial condition, and on the Net Revenues cannot be predicted.

### **Other Considerations**

*Debt Covenants.* The City is obligated to comply with the Rate Covenant. Failure to comply with such Rate Covenant, if not cured or waived, could result in the City being required to repay or finance the related borrowings before their due date, limit future borrowings, cause cross default issues, and increase borrowing costs. If forced to repay or refinance (on less favorable terms) these borrowings, the Department’s business, financial condition, and results of operations could be adversely affected by increased costs and rates.

*Water Rates.* While there is currently no State statute regulating Water System rates, future State statutes or court decisions could limit or otherwise adversely affect the City’s ability to set Water System rates. See “– Adverse Change in Laws” above.

### **Forward Looking Statements**

This Official Statement contains certain statements relating to future actions or results that are forward-looking statements. When used in this Official Statement, the words “estimate,” “intend,” “expect”, “project” and similar expressions identify forward-looking statements. Any forward-looking statement is subject to uncertainty and risks that could cause future actions and actual results to differ, possibly materially, from those contemplated in such forward-looking statements. Inevitably, some assumptions used to develop forward-looking statements will not be realized or unanticipated events and circumstances may occur. Therefore, bondholders and potential investors should be aware that there are likely to be differences between forward-looking statements and future actions and actual results; those differences could be material. The City does not undertake any obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

## LITIGATION

There are no pending legal proceedings to which the City is a party or to which any of its property is subject that may materially affect the City's ability to pay the principal of and interest on the Bonds when they become due.

The City, like other large municipalities, is involved in various litigation relating principally to claims arising from contracts, personal injury, property damage, tax claims, police conduct and other matters. However, there is neither litigation pending nor, to the best of the City's knowledge, threatened, seeking to restrain or enjoin the issuance or delivery of the Bonds, or except as disclosed herein, materially adversely affecting the collection, pledge or application of any moneys or security provided for the payment of the Bonds.

*City of Chicago v. City of Harvey.* The City of Harvey ("Harvey"), which purchases water from the City and resells it to five downstream municipalities as well as to its own residents and businesses, stopped making regular water payments to the City in November 2008. The City filed a lawsuit in the Circuit Court of Cook County, Illinois (the "Circuit Court") against Harvey, which the parties settled in January 2015 with the entry of a consent decree (the "Consent Decree") that required Harvey pay \$20,000,000 to the City for past unpaid water charges in fixed monthly amounts over seven years with three percent interest, as well as to timely pay its current water bills. After Harvey violated the Consent Decree by, among other things, falling behind on payments and failing to submit quarterly reports, the City filed motions for final judgment, specific performance, and to appoint a receiver over Harvey's water system. Those motions were granted, and the receiver was in place from August 2017 through December 2020, at which time he was discharged by the Circuit Court.

Subsequently, the parties agreed to an interim order (the "Interim Order") (which has been extended from time to time and is currently set to expire on June 7, 2023) to govern their relationship while a final settlement is being negotiated. Under the Interim Order, Harvey is obligated to pay the City at least 70% of its water revenue, and, to accomplish that obligation, all five of its downstream municipal customers as well as its eight largest commercial customers are obligated to pay the bills that would otherwise be paid to Harvey to an escrow agent, who receives the funds and distributes those funds to the City on a monthly basis to satisfy Harvey's current water bills. The current balance of the judgment owed by Harvey to the City is approximately \$35,000,000; Harvey has not made a judgment payment since December 2019. The City is vigorously pursuing this case.

*City of Chicago v. Village of Dolton.* The Village of Dolton, Illinois ("Dolton") which purchases water from the City and resells it to its own residents and businesses had fallen behind in making regular payments to the City in 2009. The City filed a lawsuit in the Circuit Court against Dolton in March 2018, which the parties settled in November 2018 with the entry of a consent decree. Under the consent decree, judgement was entered against Dolton in the amount of \$9,086,343.49, to be paid via an initial payment of \$600,000 in November 2018, and subsequent annual installment of \$1,153,022.17 over ten years. Since the settlement, Dolton has paid its current water charges and its annual settlement payments, and its next settlement installment payment is due on or before December 31, 2023.

*City of Chicago v. Village of Robbins.* The Village of Robbins, Illinois ("Robbins") which purchases water from the City and resells it to its own residents and businesses, has struggled to make regular payments to the City since the 1990s. The City filed a lawsuit in the Circuit Court against Robbins in March 2018, which is currently pending. The City obtained judgment on Robbins' liability to the City. Discovery on the damages is ongoing. The City is vigorously pursuing this case.



*Farmer v. City of Chicago.* This is a putative class action in the Circuit Court challenging the reasonableness of the City’s water rates. In particular, the plaintiff alleges that the various exemptions for hospitals, certain government organizations and non-profits cause non-exempt customers to pay more, causing their rates to be unreasonable. The plaintiff seeks, on behalf of a class of City water customers, “disgorgement” of the excess charges in the period 2016 to the present. The City has filed a motion to dismiss. The motion has been briefed and argued and a decision is pending. The City is vigorously defending this case.

*Benchmark Construction Company, Inc. (“Benchmark”) v. City of Chicago.* Benchmark was hired by the Department to replace water mains during 2013 – 2019. The City determined that Benchmark was in default under its water main replacement contracts due to its failure to comply with standards mandated under State law (the “Separation Standards”) with respect to the separation of water mains from sewer mains. Benchmark filed suit in the Circuit Court in December 2021 challenging the City’s determination and seeking damages. In March 2022, Benchmark filed suit against the City and the IEPA in the United States District Court for the Northern District of Illinois, challenging the constitutionality of the Separation Standards. The City is vigorously defending both cases.

*NPL Construction Co. (“NPL”) v. City of Chicago.* NPL was hired by the Department to replace water mains during 2016 – 2019. The City determined that NPL was in default under its water main replacement contracts due to its failure to comply with the Separation Standards. NPL filed suit in the Circuit Court in December 2021 challenging the City’s determination and seeking damages. The City is vigorously defending this case.

## **RATINGS**

The Bonds are rated “A+” (stable outlook) by S&P Global Ratings, “A” (positive outlook) by Fitch Ratings and “AA” (stable outlook) by Kroll Bond Rating Agency, Inc. The Insured Bonds are expected to be assigned ratings of “AA” (stable outlook) and “AA+” (stable outlook) by S&P and Kroll, respectively, based upon the issuance of the Policy for the Insured Bonds by AGM (defined herein) at the time of delivery of the Insured Bonds. The City did not request a rating from any other rating service for the Bonds. Any explanation of the significance of such ratings may be obtained only from the respective Rating Agencies. Certain information and materials concerning the Bonds, the City and the Water System were furnished to the Rating Agencies by the City and others. There is no assurance that any of the ratings will be maintained for any given period of time or that any of them may not be raised, lowered or withdrawn entirely by the respective Rating Agency, if, in its judgment, circumstances so warrant. Any change in or withdrawal of any rating may have an adverse effect on the price at which the Bonds may be resold.

## **CERTAIN LEGAL MATTERS**

Legal matters incident to the authorization and issuance of the Bonds are subject to the separate approving opinions of Miller, Canfield, Paddock and Stone, P.L.C, Chicago, Illinois, and Golden Holley James LLP, Chicago, Illinois, Co-Bond Counsel. The proposed form of their opinions is included herein as APPENDIX D – “PROPOSED FORM OF OPINIONS BY CO-BOND COUNSEL.”

Certain legal matters will be passed upon for the City by (i) its Acting Corporation Counsel, and (ii) in connection with the preparation of this Official Statement, Cotillas and Associates and Burke Burns and Pinelli, Ltd., Co-Disclosure Counsel to the City. Certain legal matters will be passed on for the Underwriters by Chico & Nunes, P.C.

## **INDEPENDENT AUDITORS**

The ANNUAL COMPREHENSIVE FINANCIAL REPORT FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 of the City of Chicago, Illinois Water Fund and included as APPENDIX C to this Official Statement have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing herein.

## **FINANCIAL ADVISOR AND INDEPENDENT REGISTERED MUNICIPAL ADVISOR**

The City has retained PFM Financial Advisors LLC, Chicago, Illinois, and Sycamore Advisors LLC to act as financial advisors (the “Financial Advisors”) in connection with the issuance and sale of the Bonds. The Financial Advisors have provided advice on the plan of financing and structure of the Bonds and has reviewed certain documents, including this Official Statement, with respect to financial matters. The Financial Advisors have not independently verified the factual information contained in this Official Statement but have relied on the information provided by the City and other sources. The Financial Advisors are a “municipal advisor” as defined in SEC Rule 15Ba1-1.

The City has retained six firms (Acacia Financial Group; Martin J. Luby LLC; PFM Financial Advisors LLC; Public Alternative Advisors, LLC; RSI Group, LLC and Sycamore Advisors, LLC) to serve as a pool of independent registered municipal advisors (the “IRMAs”) as defined in the SEC Rule to evaluate financing proposals and recommendations in connection with the City’s various bond issuance programs and other financing ideas being considered by the City; however, the IRMAs will not advise on the investment of City funds held by the Office of the City Treasurer. The IRMAs’ compensation is not dependent on the issuance of the Bonds.

## **UNDERWRITING**

Mesirow Financial, Inc., as representative on behalf of itself and the other underwriters listed on the cover of this Official Statement (the “Underwriters”), has agreed, subject to certain conditions, to purchase the Series 2023A Bonds, at the purchase price of \$277,118,151.81 (which represents the aggregate principal amount of the Series 2023A Bonds plus an original issue premium of \$24,583,813.90 less an Underwriters’ discount of \$1,675,662.09); and the Series 2023B Bonds, at the purchase price of \$355,459,363.47 (which represents the aggregate principal amount of the Series 2023B Bonds plus a net original issue premium of \$35,256,349.45 less an Underwriters’ discount of \$2,001,985.98).

The obligation of the Underwriters to accept delivery of the Bonds is subject to various conditions set forth in a Bond Purchase Agreement between the Underwriters and the City. The Underwriters are obligated to purchase all of the Bonds if any of the Bonds are purchased.

The Bonds are being offered for sale to the public at the prices shown on the inside cover page hereof. The Underwriters reserve the right to lower such initial offering prices as they deem necessary in connection with the marketing of the Bonds. The Underwriters may offer and sell the Bonds to certain dealers (including dealers depositing the Bonds into investment trusts) and others at prices lower than the initial public offering price or prices set forth in this Official Statement. The Underwriters reserve the right to join with dealers and other underwriters in offering the Bonds to the public.

Wells Fargo Corporate & Investment Banking (which may be referred to elsewhere as “CIB,” “Wells Fargo Securities” or “WFS”) is the trade name used for the corporate banking, capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association (“WFBNA”), a member of the National Futures Association, which conducts its municipal securities sales, trading and underwriting operations through the Wells Fargo Bank, N.A.

Municipal Finance Group, a separately identifiable department of WFBNA, registered with the U.S. Securities and Exchange Commission as a municipal securities dealer pursuant to Section 15B(a) of the Securities Exchange Act of 1934.

WFBNA, acting through its Municipal Finance Group, one of the underwriters of the Bonds, has entered into an agreement (the “WFA Distribution Agreement”) with its affiliate, Wells Fargo Clearing Services, LLC (which uses the trade name “Wells Fargo Advisors”) (“WFA”), for the distribution of certain municipal securities offerings, including the Bonds. Pursuant to the WFA Distribution Agreement, WFBNA will share a portion of its underwriting or remarketing agent compensation, as applicable, with respect to the Bonds with WFA. WFBNA has also entered into an agreement (the “WFSLLC Distribution Agreement”) with its affiliate Wells Fargo Securities, LLC (“WFSLLC”), for the distribution of municipal securities offerings, including the Bonds. Pursuant to the WFSLLC Distribution Agreement, WFBNA pays a portion of WFSLLC’s expenses based on its municipal securities transactions. WFBNA, WFSLLC, and WFA are each wholly-owned subsidiaries of Wells Fargo & Company.

San Blas Securities, LLC may offer to sell the Bonds to its affiliates, San Blas Advisory, Inc. and SB Advisory, LLC. Securities in San Blas Securities, LLC’s inventory for resale to San Blas Advisory, Inc. and SB Advisory, LLC customers may include securities such as those offered by the City.

Academy Securities, Inc. has entered into third-party distribution agreements with various dealers for the retail distribution of certain municipal securities at the original issue prices. Pursuant to these third-party distribution agreements, Academy Securities may share a portion of its underwriting compensation with the respective dealers.

The Underwriters and their respective affiliates are full service financial institutions engage in various activities, which may include sales and trading, commercial investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the City and to persons and entities with relationships with the City, for which they received or will receive customary fees and expenses.

## **TAX MATTERS**

### **Federal Tax Exemption**

In the opinion of Miller, Canfield, Paddock and Stone, P.L.C. and Golden Holley James LLP, Chicago, Illinois, Co-Bond Counsel, under existing law, the interest on the Bonds is excludable from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax. Co-Bond Counsel will express no opinion regarding any other federal tax consequences arising with respect to the Bonds and the interest thereon.

The opinion on federal tax matters are based on the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the City contained in the transcript of proceedings and which are intended to evidence and assure the foregoing, including that the Bonds are and will remain obligations the interest on which is excludable from gross income for federal income tax purposes. The City has covenanted to take the actions required of it for the interest on the Bonds to be and to remain excludable from gross income for federal income tax purposes, and not to take any actions that would adversely affect that exclusion. Co-Bond Counsel’s opinion assumes the accuracy of the City’s certifications and representations and the continuing compliance with the City’s covenants.

Noncompliance with these covenants by the City may cause the interest on the Bonds to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds. After the date of issuance of the Bonds, Co-Bond Counsel will not undertake to determine (or to so inform any person) whether any actions taken or not taken, or any events occurring or not occurring, or any other matters coming to Co-Bond Counsel's attention, may adversely affect the exclusion from gross income for federal income tax purposes of interest on the Bonds or the market prices of the Bonds.

The opinion of Co-Bond Counsel is based on current legal authority and covers certain matters not directly addressed by such authority. They represent Co-Bond Counsel's legal judgment as to the excludability of interest on the Bonds from gross income for federal income tax purposes but are not a guarantee of that conclusion. The Federal income tax opinion is not binding on the Internal Revenue Service ("IRS") or any court. Co-Bond Counsel cannot give and has not given any opinion or assurance about the effect of future changes in the Internal Revenue Code of 1986, as amended (the "Code"), the applicable regulations, the interpretations thereof or the enforcement thereof by the IRS.

Ownership of the Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, corporations subject to the branch profits tax, corporations (as defined in Section 59(k) of the Code) subject to the alternative minimum tax, financial institutions, certain insurance companies, certain S corporations, individual recipients of Social Security or Railroad Retirement benefits and taxpayers who may be deemed to have incurred (or continued) indebtedness to purchase or carry the Bonds. Co-Bond Counsel will express no opinion regarding any such consequences.

INVESTORS SHOULD CONSULT WITH THEIR TAX ADVISORS AS TO THE TAX CONSEQUENCES OF THEIR ACQUISITION, HOLDING OR DISPOSITION OF THE BONDS.

#### **Tax Treatment of Accruals on Original Issue Discount**

Under existing law, if the initial public offering price to the public (excluding bond houses and brokers) of a Bond is less than the stated redemption price of such Bonds at maturity, then such Bond is considered to have "original issue discount" equal to the difference between such initial offering price and the amount payable at maturity (such Bonds are referred to as "OID Bonds"). Such discount is treated as interest excludable from federal gross income to the extent properly allocable to each registered owner thereof. The original issue discount accrues over the term to maturity of each such OID Bonds on the basis of a constant interest rate compounded at the end of each six-month period (or shorter period) from the date of original issue with straight-line interpolations between compounding dates. The amount of original issue discount accruing during each period is added to the adjusted basis of such OID Bonds to determine taxable gain upon disposition (including sale, redemption or payment on maturity) of such OID Bonds.

The Code contains certain provisions relating to the accrual of original issue discount in the case of purchasers of OID Bonds who purchase such OID Bonds after the initial offering of a substantial amount thereof. Owners who do not purchase such OID Bonds in the initial offering at the initial offering prices should consult their own tax advisors with respect to the tax consequences of ownership of such OID Bonds.

All holders of the OID Bonds should consult their own tax advisors with respect to the allowance of a deduction for any loss on a sale or other disposition of an OID Bond to the extent such loss is attributable to accrued original issue discount.

### **Amortizable Bond Premium**

For federal income tax purposes, the excess of the initial offering price to the public (excluding bond houses and brokers) at which a Bond is sold over the amount payable at maturity thereof constitutes for the original purchasers of such Bonds (collectively, the “Original Premium Bonds”) an amortizable bond premium. The Bonds other than Original Premium Bonds may also be subject to an amortizable bond premium determined generally with regard to the taxpayer’s basis (for purposes of determining loss on a sale or exchange) and the amount payable on maturity or, in certain cases, on an earlier call date (such bonds being referred to herein collectively with the Original Premium Bonds as the “Premium Bonds”). Such amortizable bond premium is not deductible from gross income. The amount of amortizable bond premium allocable to each taxable year is generally determined on the basis of the taxpayer’s yield to maturity determined by using the taxpayer’s basis (for purposes of determining loss on sale or exchange) of such Premium Bonds and compounding at the close of each six-month accrual period. The amount of amortizable bond premium allocable to each taxable year is deducted from the taxpayer’s adjusted basis of such Premium Bonds to determine taxable gain upon disposition (including sale, redemption or payment at maturity) of such Premium Bonds.

All holders of the Premium Bonds should consult with their own tax advisors as to the amount and effect of the amortizable bond premium.

### **Market Discount**

The “market discount rules” of the Code apply to the Bonds. Accordingly, holders acquiring their Bonds subsequent to the initial issuance of the Bonds will generally be required to treat market discount recognized under the provisions of the Code as ordinary taxable income (as opposed to capital gain income). Holders should consult their own tax advisors regarding the application of the market discount provisions of the Code and the advisability of making any of the elections relating to market discount allowed by the Code.

### **Information Reporting and Backup Withholding**

Information reporting requirements apply to interest paid after March 31, 2007 on tax-exempt obligations, including the Bonds. In general, such requirements are satisfied if the interest recipient completes, and provides the payor with, a Form W-9, “Request for Taxpayer Identification Number and Certification,” or unless the recipient is one of a limited class of exempt recipients, including corporations. A recipient not otherwise exempt from information reporting who fails to satisfy the information reporting requirements will be subject to “backup withholding,” which means that the payor is required to deduct and withhold a tax from the interest payment, calculated in the manner set forth in the Code. For the foregoing purpose, a “payor” generally refers to the person or entity from whom a recipient receives its payments of interest or who collects such payments on behalf of the recipient.

If an owner purchasing the Bonds through a brokerage account has executed a Form W-9 in connection with the establishment of such account no backup withholding should occur. In any event, backup withholding does not affect the excludability of the interest on the Bonds from gross income for federal income tax purposes. Any amounts withheld pursuant to backup withholding would be allowed as a refund or a credit against the owner’s federal income tax once the required information is furnished to the IRS.

## **Future Developments**

Co-Bond Counsel's engagement with respect to the Bonds ends with the issuance of the Bonds and, unless separately engaged, bond counsel is not obligated to defend the City in the event of an audit examination by the IRS. The IRS has a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the Bonds, under current IRS procedures, the IRS will treat the City as the taxpayer and the beneficial owners of the Bonds will have only limited rights, if any, to obtain and participate in judicial review of such audit.

NO ASSURANCE CAN BE GIVEN THAT ANY FUTURE LEGISLATION OR CLARIFICATIONS OR AMENDMENTS TO THE CODE, IF ENACTED INTO LAW, WILL NOT CONTAIN PROPOSALS WHICH COULD CAUSE THE INTEREST ON THE BONDS TO BE SUBJECT DIRECTLY OR INDIRECTLY TO FEDERAL INCOME TAXATION, ADVERSELY AFFECT THE MARKET PRICE OR MARKETABILITY OF THE BONDS, OR OTHERWISE PREVENT THE HOLDERS FROM REALIZING THE FULL CURRENT BENEFIT OF THE STATUS OF THE INTEREST THEREON. CO-BOND COUNSEL EXPRESSES NO OPINION REGARDING ANY PENDING OR PROPOSED FEDERAL TAX LEGISLATION.

FURTHER, NO ASSURANCE CAN BE GIVEN THAT ANY ACTIONS OF THE INTERNAL REVENUE SERVICE, INCLUDING, BUT NOT LIMITED TO, SELECTION OF THE BONDS FOR AUDIT EXAMINATION, OR THE COURSE OR RESULT OF ANY EXAMINATION OF THE BONDS, OR OTHER BONDS WHICH PRESENT SIMILAR TAX ISSUES, WILL NOT AFFECT THE MARKET PRICE OF THE BONDS.

INVESTORS SHOULD CONSULT WITH THEIR TAX ADVISORS AS TO THE TAX CONSEQUENCES OF THEIR ACQUISITION, HOLDING OR DISPOSITION OF THE BONDS, INCLUDING THE IMPACT OF ANY PENDING OR PROPOSED FEDERAL LEGISLATION, AND THE TREATMENT OF ORIGINAL ISSUE PREMIUM OR ORIGINAL ISSUE DISCOUNT.

### **No State Tax Exemption**

Interest on the Bonds is not exempt from present Illinois income taxes. Ownership of the Bonds may result in other state and local tax consequences to certain taxpayers. Co-Bond Counsel express no opinion regarding any such collateral consequences arising with respect to the Bonds. Prospective purchasers of the Bonds should consult their tax advisors regarding the applicability of any such state and local taxes.

## **SECONDARY MARKET DISCLOSURE**

The City will enter into a Continuing Disclosure Undertaking (the "Undertaking") for the benefit of the Beneficial Owners of each Series of the Bonds to send certain information annually and to provide notice of certain events to the Municipal Securities Rulemaking Board (the "MSRB") to enable the Underwriters to meet the requirements of Section (b)(5) of Rule 15c2-12 (the "Rule") adopted by the SEC under the Exchange Act. The MSRB has designated its Electronic Municipal Market Access system, known as "EMMA," as the system to be used for continuing disclosures to investors. The information to be provided on an annual basis, the events which will be noticed on an occurrence basis and a summary of other terms of the Undertaking, including termination, amendment and remedies, are set forth below.

A failure by the City to comply with the Undertaking will not constitute a default under the Bonds, the Ordinance or the Indenture, and Beneficial Owners of the Bonds are limited to the remedies

described in the Undertaking. See “– Consequences of Failure of the City to Provide Information” under this caption. A failure by the City to comply with the Undertaking must be reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Bonds and their market price.

The following is a brief summary of certain provisions of the Undertaking of the City and does not purport to be complete. The statements made under this caption are subject to the detailed provisions of the Undertaking, a copy of which is available upon request from the City.

### **Annual Financial Information Disclosure**

The City covenants that it will disseminate to EMMA its Annual Financial Information and its Audited Financial Statements (as described below) to the MSRB, commencing with the Audited Financial Statements for the fiscal year ended December 31, 2022, prepared in accordance with generally accepted accounting principles applicable to government units (as described below).

Annual Financial Information means financial information and statistical data generally consistent with that contained under the table included under the caption “WATER SYSTEM – Capital Improvement Program” and captioned “2017-2026, 2017-2021 Historical and 2022-2026 Projected Capital And Facilities Improvement Program Funding By Source” (total amounts only), the tables captioned “Water System Service Area Population,” “Water System Accounts” and “Water System Pumpage and Capacity 2013-2022” under the caption “WATER SYSTEM SERVICE AREA” and the five-year historical data contained in the table captioned “CITY OF CHICAGO WATER SYSTEM Historical and Projected Financial Operations” under the caption “FINANCIAL OPERATIONS.”

Audited Financial Statements means the audited basic financial statements of the Water Fund prepared in accordance with generally accepted accounting principles applicable to governmental units as in effect from time to time.

Annual Financial Information exclusive of Audited Financial Statements (commencing with the Audited Financial Statements for the fiscal year ended December 31, 2022) will be provided to the MSRB on EMMA, not more than 210 days after the last day of the City’s fiscal year, which currently is December 31. If Audited Financial Statements are not available when the Annual Financial Information is filed, unaudited financial statements will be included, and Audited Financial Statements will be filed within 30 days after availability to the City.

### **Reportable Events Disclosure**

The City covenants that it will disseminate in a timely manner, not in excess of ten business days after occurrence, to the MSRB the disclosure of the occurrence of a Reportable Event (defined below) applicable to a Series of Bonds. Certain Reportable Events are required to be disclosed only to the extent that such Reportable Event is material, as materiality is interpreted under the Exchange Act. The “Reportable Events,” certain of which may not be applicable to the Bonds, are:

- (a) principal and interest payment delinquencies;
- (b) non-payment related defaults, if material;
- (c) unscheduled draws on debt service reserves reflecting financial difficulties;

- (d) unscheduled draws on credit enhancements reflecting financial difficulties;
- (e) substitution of credit or liquidity providers, or their failure to perform;
- (f) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, notices of proposed issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
- (g) modifications to rights of Bond holders, if material;
- (h) bond calls, if material, and tender offers;
- (i) defeasances;
- (j) release, substitution or sale of property securing repayment of the Series of Bonds, if material;
- (k) rating changes;
- (l) bankruptcy, insolvency, receivership or similar event of the City (considered to have occurred in the following instances: the appointment of a receiver, fiscal agent or similar officer for the City in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City, or if the jurisdiction of the City has been assumed by leaving the City Council and the City's officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City);
- (m) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City or the Water System, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
- (n) appointment of a successor or additional trustee or the change of name of a trustee, if material;
- (o) incurrence of a financial obligation of the City, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the City, any of which affect holders of Bonds, if material; and
- (p) a default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the City, any of which reflect financial difficulties.

The term "financial obligation" as used in paragraphs (o) and (p) of Reportable Events above means: (i) a debt obligation, (ii) a derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) a guarantee of (i) or (ii). The term "financial obligation" shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.



## **Consequences of Failure of the City to Provide Information**

The City shall give notice in a timely manner to the MSRB of any failure to provide disclosure of Annual Financial Information and Audited Financial Statements when the same are due under the Undertaking.

In the event of a failure of the City to comply with any provision of the Undertaking with respect to a Series of Bonds, the beneficial owner of any such Bond may seek mandamus or specific performance by court order, to cause the City to comply with its obligations under the Undertaking. The Undertaking provides that any court action must be initiated in the Circuit Court of Cook County, Illinois. A default under the Undertaking shall not be deemed a default under the Bonds, the Ordinance or the Indenture, and the sole remedy under the Undertaking in the event of any failure of the City to comply with the Undertaking shall be an action to compel performance.

## **Amendments; Waiver**

Notwithstanding any other provision of the Undertaking, the City may amend the Undertaking, and any provision of the Undertaking may be waived, if:

(a) (i) the amendment or waiver is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of the City or type of business conducted;

(ii) the Undertaking, as amended, or the provision, as waived, would have complied with the requirements of the Rule at the time of the primary offering, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(iii) the amendment or waiver does not materially impair the interests of the beneficial owners of a Series of Bonds, as determined by a party unaffiliated with the City (such as the Trustee or co-bond counsel), or by approving vote of the owners of such Series of Bonds at the time of the amendment or waiver; or

(b) the amendment or waiver is otherwise permitted by the Rule.

## **EMMA**

All documents submitted to the MSRB through EMMA pursuant to the Undertaking shall be in electronic format and accompanied by identifying information as prescribed by the MSRB, in accordance with the Rule. All documents submitted to the MSRB through EMMA will be word-searchable PDFs, configured to permit documents to be saved, viewed, printed and electronically retransmitted.

## **Termination of Undertaking**

The Undertaking with respect to a Series of Bonds shall be terminated if the City shall no longer have any legal liability for any obligation on or relating to repayment of such Series of Bonds.

## **Additional Information**

Nothing in the Undertaking will be deemed to prevent the City from disseminating any other information, using the means of dissemination set forth in the Undertaking or any other means of communication, or including any other information in any Annual Financial Information or Audited

Financial Statements or notice of occurrence of a Reportable Event, in addition to that which is required by the Undertaking. If the City chooses to include any information in any Annual Financial Information or Audited Financial Statements or notice of occurrence of a Reportable Event in addition to that which is specifically required by the Undertaking, the City shall have no obligation under the Undertaking to update such information or include it in any future Annual Financial Information or Audited Financial Statements or notice of occurrence of a Reportable Event.

### **Corrective Action Related to Certain Bond Disclosure Requirements**

The City failed to comply with certain continuing disclosure undertakings previously entered into by it pursuant to the Rule as described below. Such non-compliance may or may not be material.

The City's Chicago Midway Airport Second Lien Revenue Refunding Bonds, Series 2014C (the "**2014C Bonds**") were secured by a letter of credit by J.P. Morgan Chase Bank, N.A. (the "**Letter of Credit Bank**"). On May 19, 2015, Fitch Ratings upgraded the long-term rating of the Letter of Credit Bank from "A+" to "AA-" and its short-term rating from "F1" to "F1+." On September 19, 2014, Moody's Investors Service ("Moody's") downgraded the long-term letter of credit supported rating of the 2014C Bonds from "Aa1" to "Aa2." On May 28, 2015, Moody's upgraded the long-term letter of credit supported rating of the 2014C Bonds from "Aa2" to "Aa1." Event notices with respect to such rating changes were not filed with EMMA. The City made such filings on July 13, 2018. The Letter of Credit Bank has since been replaced.

The City failed to file on a timely basis certain Annual Financial Information for the years 2018, or 2021, with respect to the City's Tax Increment Allocation Revenue Refunding Bonds (Pilsen Redevelopment Project), Series 2014A and Series 2014B (the "**Pilsen Series 2014AB Bonds**"). However, the Pilsen Series 2014 AB Bonds have since matured. The City filed on EMMA the 2021 annual information for the Pilsen bonds on July 29, 2022.

In July 2019, the City filed on EMMA on a timely basis the City's 2018 audited financial statements for the General Fund for all then-outstanding general obligation bonds of the City, except with respect to the City's General Obligation Bonds, Library Series 2008D (the "**Series 2008D Bonds**"). On December 17, 2019, those financial statements were filed on EMMA with respect to the Series 2008D Bonds, and the City filed on EMMA a notice regarding its failure to file on a timely basis the 2018 audited financial statements with respect to the Series 2008D Bonds.

On September 14, 2020, the City filed on EMMA a notice regarding its failure to file on a timely basis a certain capital improvements table for the years 2018 and 2019, among others, in connection with the City's General Obligation Bonds, Project and Refunding Series 2014A and Taxable Project and Refunding Series 2014B (the "**Series 2014AB Bonds**"). In connection with such notice filing, the City also filed on EMMA such capital improvements tables for the years 2018 and 2019, among others, with respect to the Series 2014AB Bonds.

On September 14, 2020, the City filed on EMMA a notice regarding its failure to file on a timely basis a certain capital improvements table for the years 2018 and 2019 in connection with the City's Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A and Refunding Series 2017B (the "**Series 2017AB Bonds**"). In connection with such notice filing, the City also filed on EMMA such capital improvements tables for the years 2018 and 2019 with respect to the Series 2017AB Bonds.

On July 8, 2021, S&P Global Ratings upgraded the rating of the City's Motor Fuel Tax Revenue Refunding Bonds, Series 2013 (Issue of June 2014), including the Riverwalk Transportation

Infrastructure Finance and Innovation Act draw-down loan, from “BB+” to “BBB-.” On July 27, 2021, the City filed with EMMA an event notice relating to this rating upgrade.

On November 12, 2021, the City filed a notice regarding its failure to file on a timely basis certain Annual Financial Information including certain capital improvements tables for the year 2020 and certain third-party sourced Retirement Fund tables with respect to the Series 2014AB Bonds. In connection with such notice filing, the City also filed on EMMA such capital improvements tables for the year 2020 and Tables 4 and 9 of the third-party sourced Retirement Fund tables with respect to the Series 2014AB Bonds. On August 9, 2022, the City filed on EMMA a notice regarding its failure to file on a timely basis certain Annual Financial Information in connection with the Series 2014AB Bonds and the City’s General Obligation Bonds, Series 2021A and Series 2021B (the “**Series 2021 Bonds**”). In connection with such notice filing, the City filed Tables 1-10 on EMMA in connection with the Series 2014AB Bonds and the Series 2021 Bonds.

On August 9, 2022, the City filed on EMMA a notice regarding its failure to file on a timely basis certain Annual Financial Information in connection with the City’s Second Lien Wastewater Transmission Revenue Bonds, Project Series 2017A and Refunding Series 2017B. In connection with such notice filing, the City also filed on EMMA a table titled “Historical Capital Improvement Program Funding by Source,” including data from 2018 to 2021, among other years.

On August 9, 2022, the City filed on EMMA a notice regarding its failure to file on a timely basis certain Annual Financial Information including certain third-party sourced Retirement Fund tables for the year 2021 with respect to the Series 2014AB Bonds and the Series 2021AB Bonds. In connection with such notice filing, the City also filed on EMMA such third-party sourced Retirement Fund tables with respect to the Series 2014AB Bonds and the Series 2021AB Bonds.

### **CERTAIN VERIFICATIONS**

Robert Thomas, CPA, LLC, Shawnee Mission, Kansas (the “Verifier”), upon delivery of the Bonds, will deliver to the City, Co-Bond Counsel and the Underwriters a report stating that the firm, at the request of the City and the Underwriters, has reviewed the mathematical accuracy of certain computations based on certain assumptions relating to with respect to the mathematical computations of (i) the yield on the Bonds and the yield on certain investments and (ii) the sufficiency of amounts to be applied to the payment and redemption of the Refunded Bonds.

The Verifier will express no opinion on the attainability of any assumptions or the tax-exempt status of the Bonds. The computations verified by the Verifier are intended in part to support conclusions of the City and Co-Bond Counsel concerning the federal income tax status of the Bonds.

### **MISCELLANEOUS**

The foregoing summaries or descriptions of provisions of the Ordinance and the Indenture and all references to other materials not purporting to be quoted in full, are only brief outlines of certain provisions and do not constitute complete statements of such documents or provisions and are qualified in their entirety by reference to the complete provisions of the documents and other materials summarized or described. Copies of these documents may be obtained from the office of the Chief Financial Officer, 5th Floor, 121 North LaSalle Street, Chicago, Illinois 60602.

The references, excerpts and summaries of all documents referred to herein do not purport to be complete statements of the provisions of such documents, and reference is directed to all such documents for full and complete statements of all matters of fact relating to the Bonds, the security for the payment of the Bonds and the rights and obligations of the Owners thereof.

Any statements made in this Official Statement involving matters of opinion, projection, forecast or estimates, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of the projections or estimates will be realized. Neither this Official Statement nor any statement that may have been made orally or in writing shall be construed as a contract with the Owners or Beneficial Owners of the Bonds.

CITY OF CHICAGO

/s/ Jennie Huang Bennett

Jennie Huang Bennett  
Chief Financial Officer

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**APPENDIX A**  
**GLOSSARY OF CERTAIN TERMS**

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## APPENDIX A

### CERTAIN DEFINITIONS

*Capitalized words and terms used in this Official Statement that are not otherwise defined in this Official Statement shall have the meanings set forth below in this Appendix A, unless the context clearly indicates that some other meaning is intended.*

**“Aggregate Second Lien Bonds Requirement”** means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to 110 percent of Aggregate Second Lien Debt Service with respect to such Bond Year or other specified 12-month period with respect to the Second Lien Bonds of all series and all Section 2.08 Obligations and Section 2.09 Obligations, provided that for purposes of the provisions of the Master Indenture relating to the issuance of Second Lien Parity Bonds, “Aggregate Second Lien Bonds Requirement” means, as of any particular date of computation and with respect to a particular Bond Year or other specific 12-month period, 110 percent of Annual Second Debt Lien Debt Service with respect to such Bond Year or other specified 12-month period, and for purposes of calculating interest payable during such Bond Year or other specified 12-month period in respect of any Variable Rate Bonds, the rate of interest shall be assumed to equal the rate of interest paid with respect to such Variable Rate Bonds on the interest payment date immediately preceding the date of calculation.

**“Aggregate Second Lien Debt Service”** means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to the aggregate amounts required by the provisions of all Supplemental Indentures creating series of Second Lien Bonds and all instruments creating Section 2.08 Obligations and Section 2.09 Obligations to be deposited from Net Revenues in all sub-funds, accounts and subaccounts created under such Supplemental Indentures in such Bond Year or other specified 12-month period, provided that for purposes of calculating interest payable during such Bond Year or other specified 12-month period in respect to any Variable Rate Bonds, the rate of interest shall be assumed to equal the rate of interest paid with respect to such Variable Rate Bonds on the interest payment date immediately preceding the date of calculation.

**“Aggregate Subordinate Lien Debt Service”** means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period, an amount of money equal to the aggregate of the amounts of Annual Subordinate Lien Debt Service with respect to such Bond Year or other specified 12-month period and to the Subordinate Lien Obligations of all series.

**“Annual Second Lien Debt Service”** means, as of any particular date of computation and with respect to a particular Bond Year or other specified 12-month period and with respect to Second Lien Bonds of a particular series or consisting of a particular Section 2.08 Obligation or Section 2.09 Obligation, an amount of money equal to the sum of (a) all interest, costs or fees payable during such Bond Year or other specified 12-month period with respect to all Second Lien Bonds of said series, such Section 2.08 Obligation and Section 2.09 Obligation Outstanding on said date of computation and (b) all Principal Installments payable during such Bond Year or other specified 12-month period with respect to all Second Lien Bonds of said series, such Section 2.08 Obligation and Section 2.09 Obligation Outstanding on said date of computation, all calculated on the assumption that such Second Lien Bonds, Section 2.08 Obligation and Section 2.09 Obligation will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Master Indenture and the Supplemental Indenture creating such series or the instrument creating such Section 2.08 Obligation or Section 2.09 Obligation of Principal Installments payable at or after said date of computation.

**“Annual Subordinate Lien Debt Service”** means, as of any particular date of computation and with respect to a particular Fiscal Year or other specified 12-month period and with respect to Subordinate Lien Obligations of a particular series, an amount of money equal to the sum of (a) all interest payable during such Fiscal Year or other specified 12-month period on all Subordinate Lien Obligations of said series Outstanding on said date of computation and (b) all Principal Installments payable during such Fiscal Year or other specified 12-month period with respect to all Subordinate Lien Obligations of said series Outstanding on said date of computation, all calculated on the assumption that Subordinate Lien Obligations will after said date of computation cease to be Outstanding by reason, but only by reason, of the payment when due and application in accordance with the Subordinate Lien Obligation Ordinances of Principal Installments payable at or after said date of computation.

**“Bond Register”** means the registration books of the City kept by the Trustee (in its capacity as Bond Registrar) to evidence the registration and transfer of Bonds.

**“Bond Registrar”** means the Trustee.

**“Bond Year”** means a 12-month period commencing on November 1 of a calendar year to and including October 31 of the next succeeding calendar year.

**“Business Day”** means any day of the year on which banks located in the city, or cities, respectively, in which are located the designated corporate trust office of the Trustee are not required or authorized to remain closed on and which The New York Stock Exchange is not closed.

**“Cash on Hand”** means the sum, as shown on the most recent audited financial statements of the Water Fund, of cash, cash equivalents, liquid investments and marketable securities in the Water Fund and any account or sub-account therein, excluding any such items in the Senior Lien Rebate Accounts, Second Lien Bonds Account, Subordinate Lien Obligations Account, Commercial Paper Account or Line of Credit Notes Account.

**“Chief Financial Officer”** means the Chief Financial Officer appointed by the Mayor of the City or, in the event no person is at the time then so appointed and acting, the City Comptroller of the City.

**“City Clerk”** means the duly elected and qualified person serving as the City Clerk of the City.

**“Commercial Paper Account”** means the separate and segregated account of that name established and existing in the Water Fund.

**“Commercial Paper Notes”** means obligations commonly described as “Commercial Paper” issued by City from time to time and payable from the Commercial Paper Account.

**“Constitution”** means the 1970 Constitution of the State of Illinois.

**“Costs of Issuance”** means all fees and costs incurred by the City relating to the issuance of the Bonds, including, without limitation, printing costs, authenticating agent’s initial fees and charges, Bond Registrar’s fees and charges, Paying Agent’s fees and charges, Escrow Agent’s Fees and Charges, financial advisory fees, costs of credit ratings, engineering fees, legal fees, accounting fees, the cost of any premiums for municipal bond insurance to insure the Bonds, and the cost of any related services with respect to the Bonds.

**“Costs of Issuance Account”** means the account designated the “Series 2023 Bonds, Costs of Issuance Account” established pursuant to the Twelfth Supplemental Indenture into which Bond proceeds



are to be deposited to pay Costs of Issuance, as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Application of Bond Proceeds.”

“**Days’ Cash On Hand**” means Cash On Hand divided by the quotient of (i) operating expenses, as shown on the most recent audited financial statements of the Water Fund, and (ii) 365.

“**Escrow Agent**” means The Bank of New York Mellon Trust Company, N.A.

“**Escrow Agreement**” means the Escrow Agreement dated May 9, 2023, between the City and the Escrow Agent.

“**Federal Subsidies**” means (i) the direct payments by the Treasury Department to the City of a portion of the interest payable by the City on the 2010B Second Lien Bonds and the 2010C Second Lien Bonds and (ii) to the extent hereafter provided in Federal Compliant Obligation Authorization, payments by the Treasury Department to the City resulting from subsidies, tax credits or other incentives or benefits to state and local governments in connection with the issuance of debt obligations by such governments.

“**Governmental Obligations**” means securities which are obligations described in clauses (a) and (b) of the definition of “Permitted Investments” set forth below.

“**Gross Revenues**” means all income and receipts from any source which under generally accepted accounting principles are properly recognized as being derived from the operation of the Water System, including without limitation (a) charges imposed for water service and usage, (b) charges imposed for sales of water to municipalities (other than the City) and other users of water service, (c) charges imposed for inspections and permits for connection to the Water System, (d) grants (excluding grants received for capital projects) and (e) Investment Earnings. Gross Revenues do not include (1) amounts credited to customers on their bills, such as for payment of the price of purchasing from them capital assets of the water systems; or (2) Federal Subsidies unless the Supplemental Indenture authorizing the series of Second Lien Bonds with respect to which Federal Subsidies are to be paid provides otherwise.

“**Hedge Counterparty**” means the person or persons with which the City enters into an Interest Rate Hedge Agreement.

“**IEPA Program**” means the Illinois Clean Water Initiative Public Water Supply Loan Program or any successor program administered by the State, and any similar program through which funds authorized by the United States Government, including the United States Environmental Protection Agency, and administered by the State or any federally authorized agency.

“**Interest Payment Date**” means each May 1 and November 1, commencing on November 1, 2023.

“**Interest Rate Hedge Agreement**” means an interest rate exchange, hedge or similar agreement with a Hedge Counterparty entered into in order to hedge or manage the interest payable on all or a portion of any series of Second Lien Bonds, which agreement may include, without limitation, an interest rate swap, a forward or futures contract or an option (*e.g.*, a call, put, cap, floor or collar) and which agreement does not constitute an obligation to repay money borrowed, credit extended or the equivalent. Obligations of the City under an Interest Rate Hedge Agreement shall not constitute indebtedness of the City for which its full faith and credit are pledged or for any other purpose.

**“Investment Earnings”** means interest plus net profits and less net losses derived from investments made with any portion of the Gross Revenues or with any money in the Accounts in the Water Fund (other than the Senior Lien Rebate Accounts). Investment earnings do not include interest or earnings on investments of any Second Lien Rebate Accounts established under the Indenture.

**“Line of Credit Notes Account”** means the separate and segregated account of that name established and existing in the Water Fund.

**“Loan”** means, collectively, the borrowing or borrowings by the City from the IEPA under the IEPA Program and evidenced by one or more Loan Agreements.

**“Loan Agreement”** means each loan agreement to be entered into or to be entered into between the City and the IEPA setting forth the terms of the Loan.

**“Maturity Date”** means November 1 of any year in which Principal Installments become due on the Bonds.

**“Mayor”** means the Mayor of the City.

**“Net Revenues”** means that portion of the Gross Revenues remaining in any period after providing sufficient funds for Operation and Maintenance Costs.

**“Net Revenues Available for Bonds”** means that portion of the Net Revenues remaining in any period, plus the amounts allocated from the Water Rate Stabilization Account and from the Residual Account at the direction of the Chief Financial Officer.

**“Operation and Maintenance Costs”** means all expenses reasonably incurred by the City in connection with the operation, maintenance, renewal, replacement and repair of the Water System, which under generally accepted accounting principles are properly chargeable to the Water System and not capitalized, including, without limitation, salaries, wages, retirement plan contribution obligations, taxes, contracts for services, costs of materials and supplies, purchase of power, fuel, insurance, reasonable repairs and extensions necessary to render efficient service, the costs related to any agreements or other arrangements entered into pursuant to the Indenture, Paying Agent’s fees, and all incidental expenses, but excluding any provision for depreciation or for interest on Second Lien Bonds, Subordinate Lien Obligations, Commercial Paper Notes, Water System Line of Credit Notes or other obligations for borrowed money payable from the Net Revenues, the fees of the trustee and any remarketing agent, paying agent or bond registrar for the Second Lien Bonds, and the paying agent, if any, for Subordinate Lien Obligations.

**“Opinion of Bond Counsel”** means a written opinion of one or more firms of nationally recognized bond counsel designated by the Corporation Counsel of the City in form and substance acceptable to the City and the Trustee, which opinion may be based on a ruling or rulings of the Internal Revenue Service.

**“Outstanding”** means, with reference to any series of Second Lien Bonds, all of such obligations issued under the Master Indenture or incurred pursuant to the Master Indenture that are outstanding and unpaid, provided that such term shall not include obligations:

- (i) which have been paid or redeemed in full both as to principal, redemption, premium, if any, and interest; or

(ii) which have matured or which have been duly called for redemption and for the payment of which money is on deposit with designated paying agents for such Second Lien Bonds or are otherwise properly available, sufficient to pay the principal of, redemption premium, if any, and interest on such Second Lien Bonds; or

(iii) for which the City has provided for payment by depositing in an irrevocable trust or escrow, cash or Governmental Obligations, in each case the maturing principal of and interest on which will be sufficient, without reinvestment, to pay at maturity, or if called for redemption on the applicable redemption date, the principal of, redemption premium, if any, and interest on such Second Lien Bonds; or

(iv) which are owned by the City.

When used with respect to Subordinate Lien Obligations, “Outstanding” shall have the meaning ascribed to such term in the related Senior Lien Bond Ordinances or Subordinate Lien Obligation Ordinance as applicable.

“**Paying Agent**” means the Trustee and any other bank, national banking association or trust company designated by the City or the Trustee pursuant to the Thirteenth Supplemental Indenture as a paying agent for the Bonds, and any successor or successors appointed by the Chief Financial Officer or the Trustee under the Thirteenth Supplemental Indenture.

“**Payment Date**” means any date on which a Principal Installment or interest on any series of Second Lien Bonds is payable in accordance with its terms and the terms of the Master Indenture and the Supplemental Indenture creating such series, or, in the case of any Section 2.08 Obligation or amounts which are payable under any Section 2.09 Obligation, in accordance with the terms of the instrument creating such Section 2.08 Obligation or such Section 2.09 Obligation.

“**Permitted Investments**” means to the extent permitted by law and under the Master Indenture at the time of such investment, any of the following:

(a) United States Treasury bills, notes and bonds or certificates of indebtedness the principal of and interest on which are unconditionally guaranteed by, the United States of America;

(b) trust receipts or other certificates of ownership evidencing an ownership interest in the principal of or interest on, or both principal of and interest on, obligations described in clause (a) of this definition, which obligations are held in trust by a bank described in clause (d) of this definition, provided that such bank holds such obligations separate and segregated from all other funds and accounts of the City and of such bank and that a perfected first security interest under the Illinois Uniform Commercial Code, or under book entry procedures prescribed at 31 C.F.R. 306.0 et seq. or 31 C.F.R. 350.0 et seq. (or other similar book entry procedures similarly prescribed by federal law or regulations adopted after the date of adoption of this Indenture), has been created in such obligations for the benefit of the applicable account in the Water Fund or, to the extent permitted, in any irrevocable trust or escrow established to make provision for the payment and discharge of the indebtedness on all obligations which are payable from Net Revenues;

(c) obligations, participations or other instruments of or issued by a federal agency or United States government-sponsored enterprise or instrumentality, including but not limited to

Fannie Mae, the Federal Home Loan Mortgage Corporation, the United States Postal Service, the Government National Mortgage Association and the Federal Financing Bank;

(d) negotiable or non-negotiable time deposits evidenced (i) by certificates of deposit issued by any bank, trust company, national banking association or savings and loan association which has capital of not less than \$250,000,000 or (ii) by certificates of deposit which are continuously and fully insured by (A) any federal agency or (B) an insurer that at the time of issuance of the policy securing such deposits has been assigned a credit rating on its long-term unsecured debt within one of the two highest rating categories, without regard to any refinement or gradation of rating category by numerical modifier or otherwise, from at least two Rating Agencies (including the Trustee and its affiliates);

(e) repurchase agreements with banks described in clause (d) of this definition or with government bond dealers reporting to, trading with, and recognized as primary dealers by a Federal Reserve Bank, provided (i) that the underlying securities are obligations described in clauses (a) or (c) of this definition and are required to be continuously maintained at a market value not less than the amount so invested, (ii) the City has received an opinion of counsel to the effect that a custodian for the City has possession of the underlying securities as collateral and has a perfected first security interest in the collateral, and (iii) the collateral is in the opinion of such counsel free and clear of claims by third parties;

(f) Debt obligations of any state of the United States or any other political or governmental subdivision of any state of the United States rated, at the time of purchase, no less than “A-,” or equivalent rating, by at least two accredited Rating Agencies, or having an equivalent credit enhancement instead of a second rating;

(g) bonds, notes, debentures or other evidences of indebtedness issued or guaranteed by any corporation which are, at the time of purchase, rated as investment grade by at least two Rating Agencies, without regard to any refinement or gradation of rating categories by numerical modifier or otherwise, in their highest rating category (if not rated by at least two Rating Agencies then a rating by a single Rating Agency shall be satisfactory), for comparable types of debt obligations;

(h) repurchase agreements and investment agreements (including forward purchase agreements pursuant to which the City agrees to purchase securities of the type described in clauses (a), (b), (c), (f), (g) and (i) of this definition of “Permitted Investments”), with any bank, trust company, national banking association (which may include any Paying Agent or Bond Registrar), insurance company or any other financial institution which at the date of the agreement has an outstanding, unsecured, uninsured and unguaranteed debt issue rated by at least two Rating Agencies in one of their three highest respective long-term rating categories, without regard to any refinement or gradation of rating categories by numerical modifier or otherwise, or if such institution is not so rated, that the agreement is secured by such securities as are described in clauses (a) through (d) above, inclusive, having a market value at all times (exclusive of accrued interest, other than accrued interest paid in connection with the purchase of such securities) at least equal to the principal amount invested pursuant to the agreement, provided that (i) a custodian for the City (which custodian is not the entity with which the City has the repurchase or investment agreement) has a perfected first security interest in the collateral and the City has received an opinion of counsel to that effect, (ii) the custodian or an agent of the custodian (which agent is not the entity with which the City has the repurchase or investment agreement) has possession of the collateral, and (iii) such obligations are in the opinion of such counsel free and clear of claims by third parties;

(i) prime commercial paper of a corporation incorporated under the laws of any state of the United States of America, rated by at least two Rating Agencies in their two highest short-term rating category, without regard to any refinement or gradation of rating category by numerical modifier or otherwise;

(j) certificates of deposit of national banks that are either fully collateralized at least 110 percent by marketable U.S. government securities marked to market at least monthly or secured by a corporate surety bond issued by an insurance company licensed to do business in Illinois and having a claims-paying rating in the top rating category, without regard to any refinement or gradation of rating category by numerical modifier or otherwise, as rated by at least one Rating Agency and maintaining such rating during the term of such investment;

(k) shares of a money market fund registered under the Investment Company Act of 1940, whose shares are registered under the Securities Act of 1933, as amended, including those for which the Trustee or an affiliate performs services for a fee, whether as custodian, transfer agent, investment advisor or otherwise;

(l) Certificates of deposit of municipal depositories or national banks (including the Trustee and its affiliates) secured or collateralized as follows and shall be either:

1. Fully collateralized at least 100% by a combination of bonds, notes, or other securities constituting the direct and general obligation of any agency or instrumentality of the United States, of any US State, or any political subdivision of a US State, which are rated at least AA, or equivalent rating, by at least two accredited ratings agencies and maintaining such rating during the term of such investments.

2. Secured by a corporate surety bond issued by an insurance company licensed to do business in Illinois and having a claims-paying rating in the top rating category as rated by a nationally recognized statistical rating organization and maintaining such rating during the term of such investment.

3. Fully collateralized at least 100% by an irrevocable letter of credit issued in favor of the City of Chicago by the Federal Home Loan Bank, provided that the Federal Home Loan Bank's short-term debt obligations are rated in the highest rating category by at least one accredited ratings agency throughout the term deposit; and

(m) Any other suitable investment instrument permitted by state laws governing municipal investments or City Municipal Code, subject to the reasonable exercise of prudence in investing public funds.

**“Principal Installment”** means:

(a) as of any particular date of computation and with respect to Second Lien Bonds of a particular series or consisting of a particular Section 2.08 Obligation, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Second Lien Bonds of said series or Section 2.08 Obligation which mature on a single future date, reduced by the aggregate principal amount of such Outstanding Second Lien Bonds which would at or before said future date be retired by reason of the payment when due and the application in accordance with the Indenture, with respect to the Second Lien Bonds, or the ordinance or trust indenture creating any other series of Second Lien Bonds or the instrument creating such Section 2.08 Obligation, of Sinking Fund Payments payable at or before said future date for the retirement of such

Outstanding Second Lien Bonds, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of such Outstanding Second Lien Bonds, and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment; and

(b) as of any particular date of computation and with respect to Subordinate Lien Obligations of a particular series, an amount of money equal to the aggregate of (i) the principal amount of Outstanding Subordinate Lien Obligations of said series which mature on a single future date, reduced by the aggregate principal amount of such Outstanding Subordinate Lien Obligations which would at or before said future date be retired by reason of the payment when due and the application in accordance with the Subordinate Lien Obligation Ordinance authorizing the issuance of each series of Subordinate Lien Obligations of Sinking Fund Payments payable at or before said future date for the retirement of such Outstanding Subordinate Lien Obligations, plus (ii) the amount of any Sinking Fund Payments payable on said future date for the retirement of any Outstanding Subordinate Lien Obligations of such series, and for all purposes of the Indenture, said future date shall be deemed to be the date when such Principal Installment is payable and the date of such Principal Installment.

**“Program Fee Account”** means the account designated the “Series 2023 Bonds, Program Fee Account” established in the 2023 Second Lien Bonds Subaccount as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – 2023 Second Lien Bonds Subaccount.”

**“Program Fees”** means:

(a) the fees, expenses and other charges payable to each fiduciary, including the applicable Trustee, the applicable Trustee’s Agent and any Paying Agent, pursuant to the provisions of the Master Indenture and the corresponding Supplemental Indenture; provided that if at any time there shall be any Series of Second Lien Bonds Outstanding under a Supplemental Indenture other than the corresponding series of Bonds, then “Program Fees” for such purposes, shall mean only such portion of such fees, expenses and other charges as shall be payable with respect to, or properly allocable to, the duties performed by each such fiduciary with respect to such Bonds;

(b) ongoing fees payable to any Rating Agency maintaining a rating on such Bonds, and

(c) any other fees, expenses and other charges of a similar nature payable by the City to any person under such Supplemental Indenture or otherwise with respect to such Bonds.

**“Qualified Reserve Account Credit Instrument”** means, with respect to Second Lien Bonds, a letter of credit, surety bond or non-cancelable insurance policy issued by a domestic or foreign bank, insurance company or other financial institution whose debt obligations are rated “Aa” or “AA” or better by a Rating Agency as of its date of issuance.

**“Rating Agencies”** means the nationally recognized rating services, or any of them, that shall have assigned ratings to any Bonds Outstanding as requested by or on behalf of the City, and which ratings are then currently in effect.

**“Record Date”** means, with respect to the Bonds, each April 15 and October 15 (whether or not a Business Day).

**“Redemption Price”** means with respect to the Bonds, the redemption prices set forth under the caption “DESCRIPTION OF THE BONDS – Redemption” and, with respect to any other series of Second Lien Bonds, the redemption price of such Second Lien Bonds pursuant to the provisions of such Second Lien Bonds or the Supplemental Indenture creating such Second Lien Bonds, or such other redemption price as may be specified in such Second Lien Bonds or Supplemental Indenture.

**“Registered Owner”** means the person or persons in whose name or names a Bond is registered in the registration books kept by the Bond Registrar.

**“Residual Account”** means the separate account of that name established by the City in the Water Fund and described under the heading “SECURITY FOR THE BONDS – Flow of Funds.”

**“Second Lien Bond Determination Certificate”** means the certificate of the Chief Financial Officer with respect to the Bonds filed with the Office of the City Clerk or the Deputy City Clerk, addressed to the City Council as provided in the Ordinance.

**“Second Lien Bonds”** means the Bonds, the Series 2017 Bonds, the Series 2016A Bonds, the Series 2014 Bonds, the Series 2012 Second Lien Bonds, the Series 2010 Second Lien Bonds, the Series 2008 Second Lien Bonds, the Series 2004 Bonds, the 2001 Second Lien Bonds, the Series 2000 Bonds and all Second Lien Parity Bonds.

**“Second Lien Bonds Account”** means the separate account of that name previously established in the Water Fund as described in the Master Indenture.

**“Second Lien Parity Bonds”** means obligations which may be issued after the issuance of the Bonds which are payable from Net Revenues on an equal and ratable basis with the Bonds and all other Outstanding Second Lien Bonds.

**“Section 2.08 Obligations”** means any obligations incurred by the City to reimburse or otherwise make payments to the issuer or issuers of one or more letters of credit, lines of credit, standby purchase agreements, financial guaranty insurance policies or surety bonds (including Qualified Reserve Account Credit Instruments) securing one or more series of Second Lien Bonds as described in the Master Indenture, including any fees or other amounts payable to the issuer of any such letter of credit, line of credit, standby purchase agreement, financial guaranty insurance policy or surety bond, whether such obligations are set forth in one or more reimbursement agreements entered into between the City and the issuer of any such letter of credit, line of credit, standby purchase agreement, financial guaranty insurance policy or surety bond, or in one or more notes or other evidences of indebtedness executed and delivered by the City pursuant thereto, or any combination thereof.

**“Section 2.09 Obligations”** means any obligations incurred by the City to any one or more Hedge Counterparties pursuant to the Master Indenture, including any fees or amounts payable by the City under each related Interest Rate Hedge Agreement or agreement described in the Master Indenture.

**“Senior Lien Bond Ordinances”** means the ordinances of the City authorizing the issuance of Senior Lien Bonds.

**“Senior Lien Bonds”** means the Series 1997 Bonds and the 2000 Senior Lien Bonds.

**“Senior Lien Rebate Accounts”** means the separate accounts with that title in the Water Fund referred to in the Master Indenture.

**“Series 1997 Bonds”** means the Water Revenue Bonds, Series 1997, of the City which are Outstanding from time to time.

**“Series 2000 Bond Ordinance”** means the ordinance passed by the City Council on November 17, 1999, authorizing the issuance of the Series 2000 Bonds, and the Senior Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2000 Bonds.

**“Series 2000 Bonds”** means the \$100,000 aggregate principal amount of Second Lien Water Revenue Bonds, Series 2000, of the City.

**“Series 2000 Senior Lien Bonds”** means the Senior Lien Water Revenue Bonds, Series 2000, of the City which are Outstanding from time to time.

**“Series 2000 Subordinate Lien Obligations”** means the Loans authorized by and defined in the Series 2000 Bond Ordinance which are Outstanding from time to time.

**“Series 2001 Second Lien Bonds”** means the Second Lien Water Revenue Refunding Bonds, Series 2001, of the City which are Outstanding from time to time.

**“Series 2001 Second Lien Bond Ordinance”** means the ordinance passed by the City Council on March 7, 2001, authorizing the issuance of the 2001 Second Lien Bonds, and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the 2001 Second Lien Bonds.

**“Series 2001 Subordinate Lien Bond Ordinance”** means the ordinance passed by the City Council on October 31, 2001, authorizing the issuance of the 2001 Subordinate Lien Obligations.

**“Series 2001 Subordinate Lien Obligations”** means the Loans authorized by and defined in the Series 2001 Subordinate Lien Bond Ordinance.

**“Series 2004 Bonds”** means the \$344,575,000 aggregate principal amount of Second Lien Water Revenue Refunding Bonds, Series 2004, of the City.

**“Series 2004 Second Lien Bond Ordinance”** means the ordinance passed by the City Council on May 26, 2004, as amended by the Series 2012 Second Lien Bond Ordinance, authorizing the issuance of the Series 2004 Bonds and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2004 Bonds.

**“Series 2006 Second Lien Bond Ordinance”** means the ordinance passed by the City Council on June 28, 2006, authorizing, among other things, the issuance of 2006 Subordinate Lien Obligations.

**“Series 2006 Subordinate Lien Obligations”** means the Loans authorized by and defined in the Series 2006 Second Lien Bond Ordinance.

**“Series 2008 Second Lien Bonds”** means the Second Lien Water Revenue Project and Refunding Bonds, Series 2008, of the City, which are Outstanding from time to time.

**“Series 2010 Second Lien Bonds”** means, collectively, the Series 2010A Second Lien Bonds, the Series 2010B Second Lien Bonds and the Series 2010C Second Lien Bonds which are Outstanding from time to time.



**“Series 2010A Second Lien Bonds”** means the Second Lien Water Revenue Bonds, Project and Refunding Series 2010A (Tax-Exempt), of the City, which are Outstanding from time to time.

**“Series 2010B Second Lien Bonds”** means the Second Lien Water Revenue Bonds, Taxable Project Series 2010B (Build America Bonds – Direct Payment), of the City, which are Outstanding from time to time.

**“Series 2010C Second Lien Bonds”** means the Second Lien Water Revenue Bonds, Taxable Project Series 2010C (Qualified Energy Conservation Bonds – Direct Payment), of the City, which are Outstanding from time to time.

**“Series 2012 Second Lien Bond Ordinance”** means the ordinance passed by the City Council on March 14, 2012 as amended by the ordinance passed by the City Council on May 9, 2012, authorizing, among other things, the issuance of the Series 2012 Second Lien Bonds and the 2012 Subordinate Lien Obligations, and the Second Lien Bond Determination Certificate of the Chief Financial Officer in connection with the Series 2012 Second Lien Bonds.

**“Series 2012 Second Lien Bonds”** means the Second Lien Water Revenue Bonds, Project Series 2012, of the City, which are Outstanding from time to time.

**“Series 2012 Subordinate Lien Obligations”** means the Loans authorized by and defined in the Series 2012 Second Lien Bond Ordinance.

**“Series 2014 Bonds”** means, the Second Lien Water Revenue Bonds, Project Series 2014, of the City, which are Outstanding from time to time.

**“Series 2016A Bonds”** means the Second Lien Water Revenue Bonds, Series 2016A-1 (Tax-Exempt) and Series 2016A-2 (Taxable) of the City, which are Outstanding from time to time.

**“Series 2023 Deposit Requirement”** has the meaning set forth in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – Application of Bond Proceeds – Deposits into 2023 Second Lien Bonds Subaccount and Accounts Therein.”

**“Series 2023 Principal and Interest Account”** means the account designated the “Series 2023 Bonds, Principal and Interest Account” established in the 2023 Second Lien Bonds Subaccount as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – 2023 Second Lien Bonds Subaccount.”

**“Sinking Fund Payment”** means:

(a) as of any particular date of determination and with respect to the Outstanding Second Lien Bonds of any series or consisting of any Section 2.08 Obligation, the amount required by the Supplemental Indenture creating such series or the instrument creating such Section 2.08 Obligation to be paid in any event by the City on a single future date for the retirement of such Second Lien Bonds which mature after said future date, but does not include any amount payable by the City by reason only of the maturity of a Second Lien Bond; and

(b) as of any particular date of determination and with respect to the Outstanding Subordinate Lien Obligations of any series, the amount required by a Subordinate Lien Obligation Ordinance to be paid in any event by the City on a single future date for the retirement of Subordinate Lien Obligations of such series which mature after said future date, but does not

include any amount payable by the City by reason only of the maturity of a Subordinate Lien Obligation.

**“Subordinate Lien Debt Service Requirement”** means, for any Fiscal Year, the principal of and interest on Subordinate Lien Obligations required to be paid in that Fiscal Year.

**“Subordinate Lien Debt Service Reserve Subaccount”** means the separate Subaccount of that name previously established by the City in the Subordinate Lien Obligations Account and described in the Master Indenture.

**“Subordinate Lien Obligation Ordinances”** means each ordinance of the City authorizing the issuance of Subordinate Lien Obligations.

**“Subordinate Lien Obligation Revenues”** means all sums, amounts, funds or moneys which are deposited to the Subordinate Lien Obligations Account.

**“Subordinate Lien Obligations”** means the 2000 Subordinate Lien Obligations, the 2001 Subordinate Lien Obligations, the 2006 Subordinate Lien Obligations, the 2012 Subordinate Obligations, the 2023 Subordinate Lien Obligations and all Subordinate Lien Parity Obligations.

**“Subordinate Lien Obligations Account”** means the separate account of that name established in the Water Fund as described in the Master Indenture.

**“Subordinate Lien Parity Obligations”** means obligations which are payable from Subordinate Lien Obligation Revenues on an equal and ratable basis with all Outstanding Subordinate Lien Obligations.

**“Subordinate Lien Principal and Interest Subaccount”** means the separate Subaccount of that name established by the City in the Subordinate Lien Obligations Account and described in the Master Indenture.

**“Supplemental Indenture”** means any indenture modifying, altering, supplementing or conforming the terms of the Master Indenture duly entered into in accordance with the terms of the Master Indenture, including, without limitation, the Thirteenth Supplemental Indenture.

**“Trust Estate”** means the property conveyed to the Trustee pursuant to the granting clauses of the Thirteenth Supplemental Indenture.

**“2023 Second Lien Bonds Subaccount”** means the 2023 Second Lien Bonds Subaccount established within the Second Lien Bonds Account pursuant to the Indenture, as described in Appendix B hereto under the caption “SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE – 2023 Second Lien Bonds Subaccount.”

**“Variable Rate Bonds”** means any Second Lien Bonds the interest rate on which is not established at the time of their issuance at a single numerical rate for the entire term of such Second Lien Bonds.

**“Water Fund”** means the separate fund designated the “Water Fund of the Municipality of Chicago” previously established by the City and described in the Master Indenture.

**“Water Rate Stabilization Account”** means the separate account of that name previously established in the Water Fund and described in the Master Indenture.

**“Water System Line of Credit Agreement”** means a line of credit agreement with a commercial bank or other financial institution in the form customarily used to provide borrowers with a revolving line of credit.

**“Water System Line of Credit Notes”** means the Water System Line of Credit Notes defined in and authorized by the Series 2012 Ordinance.

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**APPENDIX B**

**SUMMARY OF CERTAIN PROVISIONS OF THE**

**INDENTURE**

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## APPENDIX B

### SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

Certain provisions of the Indenture are already summarized in the body of the Official Statement. The following is a composite summary of certain other provisions of the Indenture to which reference is made for a complete statement of the provisions and contents of such document. This summary does not purport to be complete or definitive and is qualified in its entirety by reference to the Indenture, copies of which are on file with the Trustee.

#### **Section 2.08 and Section 2.09 Obligations**

The City reserves the right under the Indenture to provide one or more irrevocable letters of credit, lines of credit, standby purchase agreements, financial guaranty insurance policies or surety bonds (including Qualified Reserve Account Credit Instruments) or a combination of the foregoing to secure the payment of the principal of, premium, if any, and interest on one or more series of Second Lien Bonds, including the Bonds, or in the event owners of such series of Second Lien Bonds have the right to require tender or purchase thereof, to secure the payment of the tender or purchase price of such Second Lien Bonds upon the demand of their owners. Any Section 2.08 Obligation is payable on a parity basis under the Indenture as any series of Second Lien Bonds issued pursuant to a Supplemental Indenture.

Subject to the last paragraph under this subcaption, if the City enters into Interest Rate Hedge Agreements with swap providers requiring the City to pay a fixed interest rate on a notional amount, or requiring the City to pay a variable interest rate on a notional amount, where the City has made a determination that such Interest Rate Hedge Agreement was entered into for the purpose of providing substitute interest payments for Second Lien Bonds of a particular maturity or maturities in a principal amount equal to the notional amount of the Interest Rate Hedge Agreement and so long as the Hedge Counterparty is not in default under such Interest Rate Hedge Agreement: (i) for purposes of any calculation of Annual Second Lien Debt Service, as applicable, the interest rate on the Second Lien Bonds of such maturity or maturities, as applicable, shall be determined as if such Second Lien Bonds, as applicable, bore interest at the fixed interest rate or the variable interest rate, as the case may be, payable by the City under such Interest Rate Hedge Agreement, (ii) any net payments required to be made by the City to the Hedge Counterparty pursuant to such Interest Rate Hedge Agreement from Net Revenues shall be deemed payments on Second Lien Bonds, as applicable, and be made on a parity with payments due on other Second Lien Bonds, as applicable, and (iii) any net payments received by the City from the Hedge Counterparty pursuant to such Interest Rate Hedge Agreement shall be applied in the Second Lien Bonds Account, as applicable.

If the City shall enter into an agreement of the type generally described in the immediately preceding paragraph that does not satisfy the requirements for qualification as an Interest Rate Hedge Agreement as a result of its failure to make the determination described therein or otherwise, then: (i) the interest rate adjustment or assumptions referred to in (i) of the immediately preceding paragraph shall not be made, (ii) any net payments required to be made by the City to the Hedge Counterparty pursuant to such Interest Rate Hedge Agreement from Gross Revenues shall be made only from amounts available after the payment of all Second Lien Bonds, and (iii) any net payments received by the City from the Hedge Counterparty pursuant to such Interest Rate Hedge Agreement may be treated as Gross Revenues at the option of the City and applied as directed by the City.

Termination payments made with respect to an Agreement described in the immediately preceding paragraphs shall be made only after making all payments then due on Second Lien Bonds.

The City may enter into an Interest Rate Hedge Agreement pursuant to the immediately preceding paragraphs only if (i) each Rating Agency then rating or proposing to rate Second Lien Bonds (if such Rating Agency also rates the unsecured obligations of the Hedge Counterparty or its guarantor) has assigned to the unsecured obligations of the Hedge Counterparty or of the person who guarantees the obligation of the Hedge Counterparty to make its payments to the City, as of the date the Interest Rate Hedge Agreement is entered into, a rating that is equal to or higher than the rating then assigned to the Second Lien Bonds by such Rating Agency (without regard to Credit Enhancement Instruments), and (ii) the City has notified each Rating Agency then rating or proposing to rate Second Lien Bonds (whether or not such Rating Agency also rates the unsecured obligations of the Hedge Counterparty or its guarantor) in writing, at least 15 days prior to executing and delivering the Interest Rate Hedge Agreement of its intention to enter into the Interest Rate Hedge Agreement and has received from such Rating Agency a written indication that the entering into of the Interest Rate Hedge Agreement by the City will not in and of itself cause a reduction or withdrawal by such Rating Agency of its unenhanced rating on the Second Lien Bonds.

### **2023 Second Lien Bonds Subaccount**

Moneys on deposit in the 2023 Second Lien Bonds Subaccount, and in each Account established in it as described below, shall be held in trust by the Trustee for the sole and exclusive benefit of the Registered Owners of the Bonds. In the Thirteenth Supplemental Indenture, the City creates and establishes with the Trustee separate Accounts within the 2023 Second Lien Bonds Subaccount as follows:

- (i) the 2023 Construction Account;
- (ii) the Program Fee Account;
- (iii) the Principal and Interest Account; and
- (iv) the Cost of Issuance Account.

### **Application of Bond Proceeds**

The aggregate proceeds received by the City from the sale of the Bonds (exclusive of underwriters' discount), shall be applied as follows:

- (i) the Trustee shall deposit into the Costs of Issuance Account an amount of the proceeds received by the City from the sale of the Bonds to be applied to pay Costs of Issuance; and
- (ii) the Trustee will deposit with the Escrow Agent an amount of the proceeds received by the City from the sale of the Bonds to be applied pursuant to the Escrow Agreement to refund the Refunded Bonds.

***Deposits into 2023 Second Lien Bonds Subaccount and Accounts Therein.*** On each Deposit Date, there shall be deposited into the 2023 Second Lien Bonds Subaccount from amounts on deposit in the Second Lien Bonds Account (other than monies, instruments or securities or any other Qualified Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued) an amount equal to the aggregate of the following amounts, which amounts shall have been calculated by the Trustee and certified by the Chief Financial Officer and transferred by the City to the Trustee in accordance with the Indenture on or before the Business Day next



preceding each such Deposit Date, respectively (such aggregate amount with respect to any Deposit Date being referred to as the “Series 2023 Deposit Requirement”):

(a) for deposit into the 2023 Principal and Interest Account, an amount equal to the 2023 Principal and Interest Account Requirement; and

(b) for deposit into the Program Fee Account, the amount estimated by the City to be required as of the close of business on the related Deposit Date to pay all Program Fees payable from amounts in the Program Fee Account during the semi-annual period commencing on such related Deposit Date and, in the case of the initial Deposit Date, any Program Fees payable from the Date of Issuance to, but not including, such initial Deposit Date.

In addition to the Series 2023 Deposit Requirement, there shall be deposited into the 2023 Second Lien Bonds Subaccount any other moneys received by the Trustee under and pursuant to the Master Indenture or the Thirteenth Supplemental Indenture, when accompanied by directions from the person depositing such moneys that such moneys are to be paid into the 2023 Second Lien Bonds Subaccount or to one or more accounts in that Subaccount.

Upon calculation by the Trustee of each Series 2023 Deposit Requirement, the Trustee shall notify the City of the Series 2023 Deposit Requirement and the Deposit Date to which it relates, and shall provide the City with such supporting documentation and calculations as the City may reasonably request.

***Use of Moneys in the Series 2023 Principal and Interest Account***

Moneys in the Series 2023 Principal and Interest Account shall be used solely for the payment of the principal of, premium, if any, and interest on the Bonds, for the redemption of the Bonds prior to their respective Maturity Dates and for the payment of Section 2.08 Obligations and Section 2.09 Obligations. Funds for payment of principal of, premium, if any, and interest due on each Payment Date with respect to the Bonds (including the optional redemption of the Bonds pursuant to the Thirteenth Supplemental Indenture and not otherwise provided for, and with respect to Section 2.08 Obligations and Section 2.09 Obligations), shall be derived from moneys held in the Series 2023 Principal and Interest Account, ratably, without preference or priority of any kind, except that termination and other non-scheduled payments with respect to Section 2.09 Obligations shall be paid on a subordinate basis.

***Use of Moneys in Program Fee Account.*** Moneys deposited into the Program Fee Account shall be used solely for the payment of Program Fees payable by the City to third parties with respect to the Bonds as set forth in a certificate of the City filed with the Trustee.

**Additional Second Lien Bonds**

As long as there are any Outstanding Second Lien Bonds, the City may issue Second Lien Parity Bonds for any lawful purpose of the Water System, including to refund Outstanding Second Lien Bonds, Subordinate Lien Obligations or obligations payable from revenues of the Water System on a basis subordinate to the Second Lien Bonds and Subordinate Lien Obligations, upon compliance with the following conditions:

(i) the funds required to be transferred to the Second Lien Bonds Account and its sub-funds, accounts and subaccounts shall have been transferred in full up to the date of delivery of such Second Lien Parity Bonds; and

(ii) (1) Net Revenues Available for Bonds for the last completed Fiscal Year prior to the issuance of the Second Lien Parity Bonds (as shown by the audit of an independent certified public accountant), or Net Revenues Available for Bonds for such last completed Fiscal Year, adjusted as described below, shall equal at least 100 percent of the sum of the Aggregate Second Lien Bonds Requirement and the Aggregate Subordinate Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a *pro forma* basis assuming (w) the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or trust indenture authorizing their issuance, sale and delivery and (x) any allocation of amounts in the f as shall be estimated by the Chief Financial Officer in the current or any future Fiscal Year. Net Revenues Available for Bonds may be adjusted as follows for purposes of this paragraph (ii):

(A) if prior to the issuance of such Second Lien Parity Bonds, the City shall have enacted an increase in the rates of the Water System from the rates in effect for such last completed Fiscal Year, Net Revenues Available for Bonds may be adjusted to reflect the Net Revenues Available for Bonds for such last completed Fiscal Year as they would have been had the increased rates been in effect during all of that last completed Fiscal Year; and

(B) if prior to the issuance of such Second Lien Parity Bonds, the City shall have enacted an increase in the rates of the Water System scheduled to take effect in a future Fiscal Year, such rate increase may be reflected in Net Revenues Available for Bonds for purposes of calculating debt service coverage for such last completed Fiscal Year;

Any such adjustment shall be evidenced by a certificate of the Chief Financial Officer.

(2) The conditions of paragraph (ii)(1), above, shall be deemed to have been satisfied if (A) Net Revenues Available for Bonds for the current or next succeeding Fiscal Year (as estimated by the Chief Financial Officer), adjusted as described in paragraph (ii)(1), shall equal at least 100 percent of the sum of the Aggregate Second Lien Bonds Requirement and the Aggregate Subordinate Lien Debt Service in each Fiscal Year following the issuance of the proposed Second Lien Parity Bonds, computed on a *pro forma* basis assuming (y) the issuance of the proposed Second Lien Parity Bonds and the application of the proceeds of any Second Lien Parity Bonds as provided in the ordinance or Supplemental Indenture authorizing their issuance, sale and delivery and (z) any allocation of amounts in the Residual Account as shall be estimated by the Chief Financial Officer in the current or any future Fiscal Year. In estimating Net Revenues Available for Bonds for the next succeeding Fiscal Year, the City shall engage the services of and be guided by a consultant of national reputation for advising municipalities with respect to setting rates and charges for water systems.

The City may issue Second Lien Parity Bonds without complying with the requirements stated above:

(i) to pay, redeem or refund Outstanding Water Revenue Bonds if in the judgment of the City there will be insufficient money available to make payments of interest on or principal of those Outstanding Water Revenue Bonds (at maturity or on Sinking Fund Payments dates) as such amounts become due; or

(ii) to pay, redeem or refund any Outstanding Water Revenue Bonds if (A) the sum of the Aggregate Second Lien Debt Service and the Aggregate Subordinate Lien Debt Service in

each Fiscal Year in which there was to be any Aggregate Second Lien Debt Service or Aggregate Subordinate Lien Debt Service on Outstanding Water Revenue Bonds after the issuance of the Second Lien Parity Bonds and the payment, redemption or refunding of such Outstanding Water Revenue Bonds will not be in excess of (B) the sum of Aggregate Second Lien Debt Service and Aggregate Subordinate Lien Debt Service prior to the issuance of the Second Lien Parity Bonds in each such Fiscal Year.

Other obligations, including bonds, may be issued payable from Net Revenues Available for Bonds on a basis subordinate to the Second Lien Bonds.

### **Covenant Against Pledge of Net Revenues**

The City has covenanted that it will not, other than in connection with the issuance of Second Lien Parity Bonds, issue any bonds, notes or other evidences of indebtedness secured by a pledge of Net Revenues or create or cause to be created any lien or charge on Net Revenues, or on any other amounts pledged for the benefit of owners of the Second Lien Bonds under the Indenture; except that the City has the right to issue (i) Subordinate Lien Obligations, (ii) bonds, notes or other evidences of indebtedness payable from or secured by a pledge of Net Revenues to be derived on and after the discharge and satisfaction of the pledge related to all Second Lien Bonds and (iii) bonds, notes or other evidences of indebtedness payable from or secured by a pledge of amounts which may be withdrawn from the Second Lien Bonds Account held under the Indenture so long as such pledge is expressly subordinate to the pledge securing the Second Lien Bonds.

### **Other Covenants**

In addition to the covenants referred to above, the City covenants under the Indenture as follows:

(a) The City will duly and punctually pay or cause to be paid the principal of, premium, if any, and interest on, all Second Lien Bonds, including, without limitation, Section 2.08 Obligations, in strict conformity with the terms of such Second Lien Bonds and of the Master Indenture, the Supplemental Indentures creating the Second Lien Bonds of each series and the instruments creating Section 2.08 Obligations or Section 2.09 Obligations, and that it will faithfully observe and perform all the conditions, covenants and requirements of the Indenture, each such Supplemental Indenture and instrument and of the Second Lien Bonds issued or incurred under such Supplemental Indenture.

(b) The City will maintain the Water System in good repair and working order, will continuously operate it on a Fiscal Year basis, and will punctually perform all duties with respect to the Water System required by the Constitution and laws of the State.

(c) So long as any Second Lien Bonds are Outstanding, the City will continue to operate the Water System as a revenue-producing system so as to produce Gross Revenues sufficient to satisfy the covenants of the Indenture.

(d) The City from time to time will make all necessary and proper repairs, replacements, additions and betterments to the Water System so that the Water System may at all times be operated efficiently, economically and properly. When any necessary equipment or facility shall have been worn out, destroyed or otherwise is insufficient for proper use, it shall be promptly replaced so that the value and efficiency of the Water System shall be at all times fully maintained.

(e) The City will establish such rules and regulations for the control and operation of the Water System as are necessary for the safe, lawful, efficient and economical operation of the Water System.

(f) The City will faithfully perform at all times to the extent applicable to the City any and all covenants, undertakings, stipulations and provisions contained in the Indenture, in any and every Second Lien Bond executed, authenticated and delivered under the Indenture, and in all proceedings pertaining to the Indenture.

(g) (i) The City will not direct or permit any action which (or fail to take any action the failure of which) would cause any Second Lien Bond to be an “arbitrage bond” within the meaning of the Code.

(ii) The covenants and agreements of the City described in this paragraph (g) shall apply as long as any of the Second Lien Bonds continue to bear interest (whether or not they are Outstanding Water Revenue Bonds) and shall also apply after the Second Lien Bonds cease to bear interest but only within such subsequent period as shall be required for the City to comply with the covenants described in this paragraph (g).

(iii) The City (A) will take all actions that are necessary to be taken (and avoid taking any action that it is necessary to avoid being taken) so that interest on tax-exempt Second Lien Bonds will not be or become subject to federal income taxation under present law, and (B) will take all actions reasonably within its power to take that are necessary to be taken (and avoid taking any actions that are reasonably within its power to avoid taking and that it is necessary to avoid) so that interest on tax-exempt Second Lien Bonds will not be or become includible in gross income for federal income tax purposes under the federal income tax laws as in effect from time to time.

(iv) The City will, without limitation, (A) to the extent required by the Code, restrict the yield on investments of amounts received upon the sale of the Second Lien Bonds and other amounts, and (B) timely rebate to the United States of America certain amounts that may be received as interest or other investment earnings on accounts of the Water Fund, all as shall be necessary to comply with this paragraph (g). The City shall also make or cause to be made identifiable investments of amounts allocable to the Second Lien Bonds as shall be necessary or appropriate to be able to ascertain the amounts that may be required so to be rebated to the United States of America. The City shall from time to time determine the amounts in accounts of the Water Fund that shall be subject so to be rebated and those amounts from time to time shall be held by the City in the second lien rebate account established under the Indenture and shall be rebated to the United States of America in the amounts and at the times as required. Such amounts so subject from time to time so to be rebated shall not be available for the other purposes for which the Water Fund and its accounts and accounts and sub-accounts established by the Indenture may be applied, and, for purposes of computing the balance in the Water Fund and such various accounts shall be disregarded.

(v) The City will not take any of the following actions without in each such event obtaining the Opinion of Bond Counsel (which may represent the City from time to time in other matters) that such action will not contravene any covenant of the Indenture and will not make compliance with those covenants impossible: (A) defease any Second Lien Bonds; (B) sell, lease or otherwise dispose of any material portion of the Water System; (C) enter into or amend any short-term or long-term contract for water service by the City other than pursuant to general rates

charged to the general public; or (D) enter into or amend any contract or arrangement for persons other than its employees to manage the Water System.

(vi) The provisions described in this paragraph (g) are not to be interpreted to impose upon the City any obligation to redeem or to purchase any Second Lien Bonds other than with proceeds or other amounts available under the Indenture.

## **Defaults and Remedies**

Each of the following events constitutes an event of default under the Indenture:

(a) payment of the principal or Redemption Price, if any, of any Second Lien Bond shall not be made when and as the same shall become due, whether at maturity or upon call for redemption or otherwise; or

(b) payment of any installment of interest on any Second Lien Bond shall not be made when the same shall become due; or

(c) the City shall fail or refuse to comply with the provisions of the Indenture, or shall default in the performance or observance of any of the covenants, agreements or conditions on its part contained therein or in the Second Lien Bonds, which materially affects the rights of the owners of the Second Lien Bonds, and such failure, refusal or default shall continue for a period of 45 days after written notice thereof by the Trustee or the owners of not less than 25 percent in principal amount of the Outstanding Second Lien Bonds; provided, however, that in the case of any such default which can be cured by due diligence but which cannot be cured within the 45-day period, the time to cure shall be extended for such period as may be necessary to remedy the default with all due diligence; or

(d) an event of default shall occur and be continuing under the provisions of any Supplemental Indenture.

Upon the happening and continuance of any event of default specified in paragraph (a) or (b) above, the Trustee shall proceed, or upon the happening and continuance of any event of default specified in paragraph (c) or (d) above (and as specified in any Supplemental Indenture with respect to additional events of default described under such Supplemental Indenture), the Trustee may unless otherwise directed pursuant to the Indenture, proceed, and upon the written direction of the owners of not less than a majority in principal amount of the Outstanding Second Lien Bonds given in accordance with the Indenture, shall proceed in its own name to protect and enforce its rights and the rights of the owners of the Second Lien Bonds by such of the following remedies or any additional remedies specified in one or more Supplemental Indentures with respect to a particular series as the Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights:

(a) by mandamus or other suit, action or proceeding at law or in equity, to enforce all rights of the owners of the Second Lien Bonds, including the right to require the City to receive and collect Gross Revenues adequate to carry out the covenants and agreements as to such Gross Revenues and their pledge under the Indenture and to require the City to carry out any other covenant or agreement with the owners of the Second Lien Bonds and to perform its duties under the Indenture;

(b) by bringing suit upon the Second Lien Bonds;

(c) by action or suit in equity, require the City to account as if it were the trustee of an express trust for the owners of the Second Lien Bonds; or

(d) by action or suit in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the owners of the Second Lien Bonds.

In the enforcement of any rights and remedies under the Indenture, the Trustee shall be entitled to sue for, enforce payment on and receive any and all amounts then or during any default becoming, and at any time remaining, due from the City but only out of moneys pledged as security for the Second Lien Bonds for principal, Redemption Price, interest or otherwise, under any provision of the Indenture or any Supplemental Indenture or of the Second Lien Bonds, and unpaid, with interest on overdue payments at the rate or rates of interest specified in such Second Lien Bonds, together with any and all costs and expenses of collection and of all proceedings under the Indenture of the owners of the Second Lien Bonds, and to recover and enforce a judgment or decree against the City for any portion of such amounts remaining unpaid, with interest, costs and expenses, and to collect from any moneys available under the Indenture for such purpose, in any manner provided by law the moneys adjudged to be payable.

Under no circumstance may the Trustee declare the principal of or interest on the Bonds to be due and payable prior to the Maturity Date following the occurrence of an Event of Default under the Master Indenture or the Thirteenth Supplemental Indenture.

In the event that upon the happening and continuance of any event of default, the moneys held by the Trustee shall be insufficient for the payment of principal or Redemption Price, if any, and interest then due on the Second Lien Bonds, such moneys (other than moneys held for the payment or redemption of particular Second Lien Bonds which have theretofore become due at maturity or by call for redemption) and any other moneys received or collected by the Trustee acting under the Master Indenture, after making provision for the payment of any expenses necessary in the opinion of the Trustee to protect the interests of the owners of the Second Lien Bonds and for the payment of the charges and expenses and liabilities incurred and advances made by the Trustee in the performance of its duties under the Master Indenture, shall, except as otherwise provided with respect to moneys held for the exclusive benefit of Second Lien Bonds of a particular series or particular Section 2.08 Obligations or Section 2.09 Obligations under the provisions of a Supplemental Indenture be applied as follows:

FIRST: to the payment to the persons entitled to the following payment, of all installments of interest then due in the order of the maturity of such installments, and, if the amount available shall not be sufficient to pay in full any installment, then to the payment of such installment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference; and

SECOND: to the payment to the persons entitled to the following payment, of the unpaid principal or Redemption Price of any Second Lien Bonds which shall have become due, whether at maturity or by call for redemption, in the order of their due dates with interest on such Second Lien Bonds from the respective dates upon which such principal or Redemption Price became due at the rate borne by the Second Lien Bonds and, if the amounts available shall not be sufficient to pay in full all the Second Lien Bonds due on any date, then to the payment of the Second Lien Bonds ratably, according to the amounts of principal or Redemption Price, if any, due on such date, to the persons entitled thereto, without any discrimination or preference.

Whenever moneys are to be applied by the Trustee pursuant to the provisions described above, such moneys shall be applied by the Trustee at such times, and from time to time, as the Trustee in its sole discretion shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. The deposit of such moneys with the Trustee, or otherwise setting aside such moneys in trust for the proper purpose, shall constitute proper application by the Trustee and the Trustee shall incur no liability whatsoever to the

City, to the owner of any Second Lien Bond or to any other person for any delay in applying any such moneys, so long as the Trustee acts with reasonable diligence, having due regard for the circumstances, and ultimately applies the same in accordance with such provisions of the Master Indenture as may be applicable at the time of application by the Trustee. Whenever the Trustee shall exercise such discretion in applying such moneys, it shall fix the date (which shall be a Payment Date unless the Trustee shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal to be paid on such date shall cease to accrue. The Trustee shall give such notice as it may deem appropriate of the fixing of any such date. The Trustee shall not be required to make payment to the owner of any unpaid Second Lien Bond unless such Second Lien Bond shall be presented to the Trustee for appropriate endorsement or for cancellation if fully paid.

In case any proceedings taken by the Trustee on account of any event of default shall have been discontinued or abandoned for any reason, then in every such case the City, the Trustee and the owners of the Second Lien Bonds shall be restored to their former positions and rights under the Master Indenture, respectively, and all rights, remedies, powers and duties of the Trustee shall continue as though no such proceeding had been taken.

Except as otherwise described herein, the owners of the majority in principal amount of the Second Lien Bonds then Outstanding shall have the right, by an instrument or concurrent instruments in writing executed and delivered to the Trustee, to direct the method of conducting all remedial proceedings to be taken by the Trustee under the Master Indenture, except that such direction shall not be otherwise than in accordance with law or the provisions of the Master Indenture, and the Trustee shall have the right to decline to follow any such direction which in the opinion of the Trustee would be unjustly prejudicial to owners of the Second Lien Bonds not parties to such direction.

No owner of any Second Lien Bond shall have any right to institute any suit, action, mandamus or other proceeding in equity or at law under the Master Indenture, or for the protection or enforcement of any right or remedy under the Master Indenture or any right under law unless such owner shall have given to the Trustee written notice of the event of default or breach of duty on account of which such suit, action or proceeding is to be taken, and unless the owners of not less than 25 percent in principal amount of the Second Lien Bonds then Outstanding shall have made written request of the Trustee after the right to exercise such powers or right of action, as the case may be, shall have occurred, and shall have afforded the Trustee a reasonable opportunity either to proceed to exercise the powers granted in the Master Indenture or granted under law to institute such action, suit or proceeding in its name and unless, also, there shall have been offered to the Trustee reasonable security and indemnity against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall have refused or neglected to comply with such request within a reasonable time; and such notification, request and offer of indemnity are declared in every such case (except with respect to the enforcement of credit enhancement devices securing Second Lien Bonds), at the option of the Trustee, to be conditions precedent to the execution of the powers under the Master Indenture or for any other remedy under the Master Indenture or under law.

AGM shall be deemed to be the sole holder of the Insured Bonds for the purpose of exercising any voting right or privilege or giving any consent or direction or taking any other action that the holders of the Insured Bonds are entitled to take pursuant to the Master Indenture pertaining to (i) defaults and remedies and (ii) the duties and obligations of the Trustee (with respect to the Insured Bonds). In furtherance thereof and as a term of the Thirteenth Supplemental Indenture and each Bond, each Insured Bondholder appoints AGM as its agent and attorney-in-fact and agrees that AGM may at any time during the continuation of any proceeding by or against the City under the United States Bankruptcy Code or any other applicable bankruptcy, insolvency, receivership, rehabilitation or similar law (an "Insolvency Proceeding") direct all matters relating to such Insolvency Proceeding, including without limitation, (A)

all matters relating to any claim or enforcement proceeding in connection with an Insolvency Proceeding (a “Claim”), (B) the direction of any appeal of any order relating to any Claim, (C) the posting of any surety, supersede as or performance bond pending any such appeal, and (D) the right to vote to accept or reject any plan of adjustment. In addition, each Insured Bondholder delegates and assigns to AGM, to the fullest extent permitted by law, the rights of each Insured Bondholder in the conduct of any Insolvency Proceeding, including, without limitation, all rights of any party to an adversary proceeding or action with respect to any court order issued in connection with any such Insolvency Proceeding. The Trustee acknowledges such appointment, delegation and assignment by each Insured Bondholder for AGM’s benefit, and agrees to cooperate with AGM in taking any action reasonably necessary or appropriate in connection with such appointment, delegation and assignment. Remedies granted to the Insured Bondholders shall expressly include mandamus, but these provisions shall not create any remedy not otherwise expressly granted by the Master Indenture.

All rights of any insurance company that has insured the scheduled payment of the principal of an interest on all or any portion of a series of Second Lien Bonds (a “Bond Insurer”) under the provisions of the Indenture described in this Appendix B under the captions “– Defaults and Remedies,” “– Supplemental Indentures Without Consent of Owners” and “– Supplemental Indentures With Consent of Owners” shall cease and terminate if: (i) such Bond Insurer has failed to make any payment under its bond insurance policy insuring such Second Lien Bonds; (ii) such bond insurance policy shall cease to be valid and binding on such Bond Insurer or shall be declared to be null and void,-or the validity or enforceability of any provision of such bond insurance policy is being contested by such Bond Insurer, or such Bond Insurer is denying further liability or obligation under such bond insurance policy; (iii) a petition has been filed and is pending against such Bond Insurer under any bankruptcy, reorganization, arrangement, insolvency, readjustment of debt, dissolution, liquidation or rehabilitation law of any jurisdiction, and has not been dismissed within sixty days after such filing; (iv) such Bond Insurer has filed a petition, which is still pending, in voluntary bankruptcy or is seeking relief under any provision of any bankruptcy; reorganization, arrangement, insolvency, readjustment of debt, dissolution, liquidation or rehabilitation law of any jurisdiction, or has consented to the filing of any petition against it under any such law; or (v) a receiver has been appointed for such Bond Insurer under the insurance laws of any jurisdiction; provided, however, that nothing in the Indenture shall in any way limit or affect the rights of the Bond Insurer as an Insured Bondholder, as subrogee of an Insured Bondholder or as assignee of an Insured Bondholder, or otherwise, to be reimbursed and indemnified for its costs and expenses and other payment on or in connection with the Insured Bonds or the Insurance Policy either by operation of law or at equity or by contract.

### **Supplemental Indentures without Consent of Owners**

A Supplemental Indenture may be authorized at any time by an ordinance of the City Council and shall be fully effective upon the execution thereof by the City and the Trustee and the filing with the Trustee of a copy of such ordinance certified by the City Clerk, for the following purposes:

(a) to close the Master Indenture against, or provide limitations and restrictions in addition to the limitations and restrictions contained in the Master Indenture on, the issuance of Second Lien Bonds or other evidences of indebtedness;

(b) to add to the covenants and agreements of the City in the Master Indenture other covenants and agreements to be observed by the City which are not contrary to or inconsistent with the Master Indenture as theretofore in effect;



(c) to add to the limitations and restrictions in the Master Indenture other limitations and restrictions to be observed by the City which are not contrary to or inconsistent with the Master Indenture as theretofore in effect;

(d) to surrender any right, power or privilege reserved to or conferred upon the City by the terms of the Master Indenture, but only if the surrender of such right, power or privilege is not contrary to or inconsistent with the covenants and agreements of the City contained in the Master Indenture;

(e) to create a series of Second Lien Bonds and, in connection with such creation, to specify and determine the matters and things referred to in the Master Indenture and also any other matters and things relative to such Second Lien Bonds which are not contrary to or inconsistent with the Master Indenture as theretofore in effect, or to amend, modify or rescind any such authorization, specification or determination at any time prior to the first issuance of such Second Lien Bonds;

(f) to confirm, as further assurance, the pledge under the Master Indenture, and the subjection of, additional properties, Net Revenues or other collateral to any lien, claim or pledge created or to be created by, the Master Indenture; and

(g) to modify any of the provisions of the Master Indenture in any respect whatever, provided that such modification shall be, and be expressed to be, effective only after all Second Lien Bonds Outstanding at the date of the execution and delivery of such Supplemental Indenture shall cease to be Outstanding.

A Supplemental Indenture may be authorized at any time by an ordinance adopted by the City Council which, upon (i) filing with the Trustee of a copy of such ordinance certified by the City Clerk, (ii) the filing with the Trustee and the City of an instrument in writing made by the Trustee consenting thereto, and (iii) execution and delivery of such Supplemental Indenture, shall be fully effective to: (1) to cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in the Master Indenture; (2) to insert such provisions clarifying matters or questions arising under the Master Indenture as are necessary or desirable and are not contrary to or inconsistent with the Master Indenture; or (3) to provide additional duties of the Trustee under the Master Indenture as in effect.

Additionally, the Thirteenth Supplemental Indenture may, without the consent of, or notice to, any of the Bondholders, be supplemented and amended, in such manner as shall not be inconsistent with the terms and provisions of the Thirteenth Supplemental Indenture or the Master Indenture, for any one or more of the following purposes:

to provide for certificated Bonds; and

to secure or maintain ratings from any Rating Agency in the highest long-term debt rating category of such Rating Agency which are available for the Bonds, which changes will not restrict, limit or reduce the obligation of the City to pay the principal of, premium, if any, and interest on such Bonds as provided in the Indenture or otherwise adversely affect the Registered Owners of such Bonds under the Indenture.

### **Supplemental Indenture with Consent of Owners**

Any modification or amendment of the Indenture or of any Supplemental Indenture or of the rights and obligations of the City and of the owners of the Second Lien Bonds, other than as described in the immediately preceding caption, may be made by a supplemental indenture authorized at any time by an ordinance of the City Council, with the written consent given as provided in the Indenture:

(a) of the registered owners of a majority in principal amount of the Second Lien Bonds Outstanding at the time such consent is given;

(b) in case less than all of the several series of then Outstanding Second Lien Bonds are affected by the modification or amendment, of the owners of a majority in principal amount of the then Outstanding Second Lien Bonds of each series so affected;

(c) in case any Section 2.08 Obligations are affected by the modification or amendment, of the party to whom Section 2.08 Obligations so affected are payable; and

(d) in case any swap provider is affected by the modification or amendment, of the swap provider so affected.

No such modification or amendment shall permit a change in the terms of redemption or maturity of the principal of any Outstanding Second Lien Bond or of any installment of interest thereon or a reduction in the principal amount or the Redemption Price thereof or a reduction in the rate of interest thereon, or in terms of purchase or the purchase price thereof, without the consent of the owner of such Second Lien Bond, or shall reduce the percentages or otherwise affect the classes of Second Lien Bonds the consent of the owners of which is required to effect any such modification or amendment, or shall change or modify any of the rights or obligations of the Trustee or any Paying Agent with respect to the Second Lien Bonds without its written assent thereto.

## **Defeasance**

If the City shall pay or cause to be paid to the owners of all Second Lien Bonds, the principal and interest and Redemption Price, if any, to become due thereon, at the times and in the manner stipulated therein, in the Master Indenture, the Supplemental Indentures creating such Second Lien Bonds and in the instruments creating Section 2.08 Obligations and Section 2.09 Obligations, then the pledge of Net Revenues provided by the Master Indenture and all other rights granted thereby shall be discharged and satisfied.

Any Second Lien Bonds or interest installments appertaining to such Second Lien Bonds, whether at or prior to the maturity or the prior redemption date thereof shall be deemed to have been paid within the meaning of the preceding paragraph if:

(a) in case any of said Second Lien Bonds are to be redeemed on any date prior to their maturity, the City shall have taken all action necessary to call such Second Lien Bonds for redemption and notice of such redemption shall have been duly given or provision satisfactory to the Trustee shall have been made for the giving of such notice;

(b) there shall have been deposited with the Trustee for such purpose either moneys which are sufficient or Governmental Obligations (consisting of obligations described in clause (a) of the definition of Permitted Investments) maturing and bearing interest at times and in amounts sufficient (without reinvestment of such Governmental Obligations), together with the moneys on deposit with the Trustee for such purpose, to pay when due the principal or Redemption Price, if any, and interest due and to become due on said Second Lien Bonds on and prior to the redemption date or maturity date of such Second Lien Bonds, as the case may be; and

(c) in the event said Second Lien Bonds are not by their terms subject to redemption within the next succeeding 45 days, the City shall have given the Trustee, in form satisfactory to it, irrevocable instructions to mail, as soon as practicable, a notice to the owners of such Second Lien Bonds that the

deposit required by clause (b) above has been made with the Trustee and that said Second Lien Bonds are deemed to have been paid as described under this caption “– Defeasance” and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal or Redemption Price, if any, of, and accrued interest on, said Second Lien Bonds.

No defeasance of a Second Lien Bond that is to be paid more than 90 days after the date of the deposit referred to in clause (b) above shall be effective until the Trustee shall have received a verification report signed by an independent certified public accountant that the Governmental Obligations (described in clause (a) of the definition of Permitted Investments) and moneys to be deposited for such purpose are sufficient to pay the principal and Redemption Price of, and interest on, all Second Lien Bonds with respect to which provision for payment is to be made pursuant to the process described under this caption “– Defeasance” by virtue of the deposit of such Governmental Obligations and moneys.

The City has reserved the right to substitute in place of Governmental Obligations and moneys, other Governmental Obligations and moneys sufficient to pay when due the principal and interest or Redemption Price, if any, to become due on all Second Lien Bonds secured by such obligations; provided that prior to such substitution the City files with the Trustee: (i) a verification report signed by an independent certified public accountant stating that the substitute Governmental Obligations and moneys, as substituted, are sufficient to pay the principal and Redemption Price of, and interest on, all Second Lien Bonds for which provision of payment was made by the deposit of the initial Governmental Obligations and moneys, and (ii) an opinion of nationally recognized bond counsel to the effect that such substitution has been duly authorized in accordance with the Indenture and will not adversely affect the tax-exempt status of any Second Lien Bonds previously authenticated and delivered under the Indenture.

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**APPENDIX C**

**CITY OF CHICAGO, ILLINOIS WATER FUND ANNUAL COMPREHENSIVE FINANCIAL  
REPORT FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020, REQUIRED  
SUPPLEMENTARY INFORMATION, ADDITIONAL INFORMATION, AND INDEPENDENT  
AUDITOR'S REPORT**

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# City of Chicago, Illinois Water Fund

Basic Financial Statements as of and for the Years  
Ended December 31, 2021 and 2020, Required  
Supplementary Information, Additional  
Information, Statistical Information, and  
Independent Auditor's Report

# CITY OF CHICAGO, ILLINOIS

## WATER FUND

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# CITY OF CHICAGO, ILLINOIS

## WATER FUND

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## **INDEPENDENT AUDITOR'S REPORT**

To the Honorable Lori Lightfoot, Mayor  
And Members of the City Council  
City of Chicago, Illinois

### **Report on the Audits of the Financial Statements**

#### ***Opinion***

We have audited the financial statements of the Water Fund ("Water Fund"), an enterprise fund of the City of Chicago, Illinois (the "City"), as of and for the years ended December 31, 2021 and 2020, and the related notes to the financial statements, which collectively comprise the Water Fund's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Water Fund as of December 31, 2021 and 2020, and the respective changes in financial position, and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### ***Basis for Opinion***

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audits of the Financial Statements section of our report. We are required to be independent of the Water Fund, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Emphasis of Matter**

As discussed in Note 1, the basic financial statements present only the Water Fund, an enterprise fund of the City, and do not purport to, and do not, present fairly the financial position of the City as of December 31, 2021 and 2020, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

#### **Responsibilities of Management for the Financial Statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

## **Auditor's Responsibilities for the Audits of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- exercise professional judgment and maintain professional skepticism throughout the audit.
- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Water Fund's internal control. Accordingly, no such opinion is expressed.
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audits.

## **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability and Related Ratios and the Schedule of Contributions be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### **Supplementary Information**

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Water Fund's basic financial statements. The additional supplementary information is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and other auditors. In our opinion, based on our audits and the reports of other auditors, the Combining and Individual Fund Statements are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

### **Other Information**

Management is responsible for the other information included in the basic financial statements. The other information is comprised of the statistical section but does not include the basic financial statements and our auditor's report thereon.

In connection with our audits of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

*Deloitte & Touche LLP*

June 29, 2022

# CITY OF CHICAGO, ILLINOIS

## WATER FUND

### MANAGEMENT'S DISCUSSION AND ANALYSIS

---

The following discussion and analysis of the City of Chicago, Illinois (the "City"), Water Fund's ("Water Fund") financial performance provides an introduction and overview of the Water Fund's financial activities for the years ended December 31, 2021 and 2020. Please read this discussion in conjunction with the Water Fund's basic financial statements and the notes to basic financial statements following this section.

#### FINANCIAL HIGHLIGHTS

##### **2021**

- Gross operating revenues for 2021 increased by \$24.9 million compared to 2020 gross operating revenues. This increase is primarily due to increases in water fees of \$20.0 million resulting from a water rate increase of 1.10% effective June 1, 2021, and an increase in pumpage, and other operating revenues of \$4.9 million due to an increase in activities such as full payment certificates for property transfers and construction on third party property where water is used.
- Operating expenses before depreciation and amortization for 2021 increased by \$15.8 million compared to 2020 mainly due to a decrease in pension benefit resulting from current year inflow and outflow, pension activities due to the changes in actuarial assumptions, and an increase in overtime offset by a decrease in employee benefit expenses.
- The Water Fund's net position at December 31, 2021, was \$2,001.5 million. This is an increase of \$273.1 million over net position at December 31, 2020, due to an increase in revenue as the provision for doubtful accounts decreased due to the full year implementation of the Utility Billing Relief Program (UBR), which provides financial relief to low-income households, as well as an increase in revenue collections.
- Utility plant additions in 2021 were \$179.7 million due to the continuing capital improvement program.

##### **2020**

- Gross operating revenues for 2020 increased by \$1.3 million compared to 2019 gross operating revenues. This increase is primarily due to an increase in water fees of \$5.9 million resulting from a water rate increase of 2.45% effective June 1, 2020, offset by a decrease in other operating revenues of about \$4.6 million due to a decrease in penalties for uncollected water fees to provide relief to customers during the COVID 19 pandemic.
- Operating expenses before depreciation and amortization for 2020 decreased by \$110.0 million compared to 2019 mainly due to decreases in pension expenses due to recognition of current year inflows resulting from changes in actuarial assumptions and reduction in the allocation of pension costs to the Water Fund compared to the Governmental and remaining Enterprise Funds, and court settlement offset by increases in salaries and workers' compensation expenses.
- The Water Fund's net position at December 31, 2020, was \$1,728.4 million. This is an increase of \$270.2 million over net position at December 31, 2019, due to an excess of revenues over expenses.

- Utility plant additions in 2020 were \$222.2 million due to the continuing capital improvement program.

## **OVERVIEW OF THE BASIC FINANCIAL STATEMENTS**

This discussion and analysis is intended to serve as an introduction to the Water Fund's basic financial statements. The Water Fund's basic financial statements comprise the financial statements and the notes to basic financial statements. In addition to the basic financial statements, this report also presents additional information after the notes to basic financial statements.

The statements of net position present all of the Water Fund's assets, deferred outflows, liabilities, and deferred inflows using the accrual basis of accounting. The difference between assets, deferred outflows, liabilities, and deferred inflows is reported as net position. The increase or decrease in net position may serve as an indicator, over time, as to whether the Water Fund's financial position is improving or deteriorating.

The statements of revenues, expenses, and changes in net position present all current-year revenues and expenses, regardless of when cash is received or paid, and the ensuing change in net position.

The statements of cash flows report how cash and cash equivalents are provided and used by the Water Fund's operating, capital financing, and investing activities. These statements present the cash received and disbursed, the net increase or decrease in cash and cash equivalents for the year, and the cash and cash equivalents balance at year-end.

The notes to basic financial statements are an integral part of the basic financial statements; accordingly, such disclosures are essential for a full understanding of the information provided in the basic financial statements.

The required supplementary information section presents the schedule of changes in the net pension liability and related ratios and the schedule of contributions.

In addition to the basic financial statements, this report includes the additional supplementary and statistical data. The additional supplementary information section presents the schedule of utility plan and the statistical data section presents unaudited debt service coverage calculation and includes certain unaudited information related to the Water Fund's historical financial and nonfinancial operating results and capital activities.

## FINANCIAL ANALYSIS

At December 31, 2021, the Water Fund's financial position continued to be strong with total assets and deferred outflows of \$6,080.5 million, total liabilities and deferred inflows of \$4,079.0 million, and net position of \$2,001.5 million. A comparative condensed summary of the Water Fund's net position at December 31, 2021, 2020, and 2019, is as follows (in thousands):

	<b>Net Position</b>		
	<b>2021</b>	<b>2020</b>	<b>2019</b>
Current assets	\$ 905,470	\$ 859,024	\$ 876,671
Restricted and other assets—noncurrent	2,268	2,442	2,620
Utility plant—net	<u>5,128,500</u>	<u>5,064,573</u>	<u>4,953,026</u>
Total assets	6,036,238	5,926,039	5,832,317
Deferred outflows	<u>44,315</u>	<u>56,571</u>	<u>78,074</u>
Total assets and deferred outflows	<u>\$ 6,080,553</u>	<u>\$ 5,982,610</u>	<u>\$ 5,910,391</u>
Current liabilities	\$ 444,355	\$ 435,049	\$ 409,595
Long-term liabilities	<u>3,518,421</u>	<u>3,613,527</u>	<u>3,774,025</u>
Total liabilities	3,962,776	4,048,576	4,183,620
Deferred inflows	<u>116,259</u>	<u>205,620</u>	<u>268,569</u>
Total liabilities and deferred inflows	<u>\$ 4,079,035</u>	<u>\$ 4,254,196</u>	<u>\$ 4,452,189</u>
Net position:			
Net investment in capital assets	\$ 2,746,413	\$ 2,574,298	\$ 2,351,097
Restricted for capital projects	3	8	375
Unrestricted	<u>(744,898)</u>	<u>(845,892)</u>	<u>(893,270)</u>
Total net position	<u>\$ 2,001,518</u>	<u>\$ 1,728,414</u>	<u>\$ 1,458,202</u>

### 2021

Current assets of \$905.5 million at December 31, 2021, increased by \$46.4 million (5.4%) over 2020 due to increases in unrestricted investments of \$47.3 million (11.4%), resulting from the transfer of cash to unrestricted investments to obtain higher long term investment earnings, and net accounts receivable of \$14.5 million (7.9%) resulting from a decrease in allowance for uncollected prior years' water fees due to the full year implementation of the Utility Billing Relief (UBR) Program providing financial relief to low income households, offset by a decrease in total restricted assets of \$14.5 million.

The increase in current liabilities of \$9.3 million (2.1%) during 2021 is due to increases in due to other City funds of \$33.3 million (182.5%) related to timing differences in cash used for payments and current portion of long term debt of \$5.8 million (5.6%) due to the planned increases in debt service payments related to the capital program offset by a decrease in accrued liabilities of \$14.2 million (6.6%) resulting from a decrease in retainage payables and by a net decrease in restricted and unrestricted accounts payable of \$15.3 million (19.7%) that is directly related to the timing of payments of accounts payables.

Deferred outflows decreased by \$12.3 million (21.7%) during 2021 due to the decrease in pensions' proportionate share of pension liabilities; amortization and deferred inflows decreased by \$89.4 million (43.5%) during 2021 due to the full amortization of deferred inflows calculated in 2017 and amortized over four years, decreases in pension benefit and a decrease in the proportionate share amortization resulting from the difference between 2021 projected and actual earnings on pension plan investments.

At December 31, 2021, net position was \$2,001.5 million, an increase of \$273.1 million (15.8%) over 2020.

## **2020**

Current assets of \$859.0 million at December 31, 2020, decreased by \$17.6 million (2.0%) over 2019 as a result of decreases in cash and cash equivalents of \$28.6 million (70.1%) resulting from the transfer to unrestricted investments to obtain higher investment earnings, which increased by \$15.2 million (3.8%); and decrease in net accounts receivable of \$10.9 million (5.6%) resulting from an increase in allowance for uncollected prior years' water fees, offset by an increase in due from other City funds of \$6.5 million (14.9%).

The increase in current liabilities of \$25.4 million (6.2%) during 2020 is due to increases in accrued liabilities of \$36.5 million (20.4%) resulting from additional IEPA loan draws in 2020 and an increase in workers' compensation liability, current portion of long term debt of \$5.3 million (5.4%) and due to other City funds of \$7.8 million (74%) offset by decreases in restricted and unrestricted accounts payable totaling \$7.3 million (8.6%) that is directly related to the timing of payments of accounts payables and a decrease in unearned revenue of \$16.3 million (100.0%). In 2020, the Water Fund changed its billing for unmetered accounts from billing every 6 months in advance to monthly billing, resulting in the decrease in unearned revenue.

Deferred outflows decreased by \$21.5 million (27.5%) during 2020 due to the amortization of changes in assumptions and deferred inflows decreased by \$62.9 million (23.4%) during 2020 due to the difference between 2020 projected and actual earnings on pension plan investments.

At December 31, 2020, net position was \$1,728.4 million, an increase of \$270.2 million (18.5%) over 2019.



The primary sources of the Water Fund’s operating revenues are water usage charges. These revenues fund all Water Fund operating expenses, fund deposits, capital construction, and debt service requirements. A comparative condensed summary of the Water Fund’s revenues, expenses, and changes in net position for the years ended December 31, 2021, 2020, and 2019, is as follows (in thousands):

	<b>Revenues, Expenses, and Changes in Net Position</b>		
	<b>2021</b>	<b>2020</b>	<b>2019</b>
Operating revenues:			
Water sales—net	\$ 748,590	\$ 714,310	\$ 717,496
Other operating revenues	<u>27,135</u>	<u>22,268</u>	<u>26,882</u>
Total operating revenues	<u>775,725</u>	<u>736,578</u>	<u>744,378</u>
Operating expenses	323,105	307,263	417,267
Depreciation and amortization	<u>86,877</u>	<u>82,495</u>	<u>79,870</u>
Total operating expenses	<u>409,982</u>	<u>389,758</u>	<u>497,137</u>
Net operating income (loss)	<u>365,743</u>	<u>346,820</u>	<u>247,241</u>
Nonoperating revenues	3,771	21,707	24,515
Nonoperating expenses	<u>(93,990)</u>	<u>(95,895)</u>	<u>(97,036)</u>
Net non operating income (loss)	(90,219)	(74,188)	(72,521)
Transfers out	<u>(2,420)</u>	<u>(2,420)</u>	<u>(2,420)</u>
Change in net position	273,104	270,212	172,300
Net position—beginning of year	<u>1,728,414</u>	<u>1,458,202</u>	<u>1,285,902</u>
Net position—end of year	<u>\$ 2,001,518</u>	<u>\$ 1,728,414</u>	<u>\$ 1,458,202</u>

## **2021**

Water sales—net and other operating revenues comprise the Water Fund’s \$775.7 million operating revenues. The increase in 2021 total operating revenues of \$39.1 million (5.3%) from 2020 was primarily due to an increase in water sales—net of \$34.3 million (4.8%) resulting from a decrease in provision for doubtful accounts of about \$14.2 million (48.4%). This decrease was due to the implementation of the UBR Program, which extended due dates of accounts receivable for eligible customers, therefore decreasing the provision for doubtful accounts. The increase in other operating revenues of about \$4.9 million (21.9%) was due to an increase in activities.

In 2021, net nonoperating revenue of \$3.7 million was composed of net interest income, online convenient fees for water fees payments and net revenue that relates to constructions done by Department of Water Management for other City departments and private companies.

**2020**

Water sales and other operating revenues comprise the Water Fund's \$736.6 million operating revenues. The decrease in 2020 total operating revenues of \$7.8 million (1.0%) from 2019 was primarily due to an increase in provision for doubtful accounts of about \$9.1 million (44.6%) resulting from a decrease in collected water charges from prior years' accounts receivable and the implementation of the Utility Billing Relief program, which allows eligible customers to apply for relief on past due utility balances.

In 2020, net nonoperating revenue of \$21.7 million was composed of net interest income, internet convenient fees for water fees payments and net revenue that relates to constructions done by Department of Water Management for other City departments and private companies.

A comparative summary of the Water Fund's operating expenses, as classified in the basic financial statements, for the years ended December 31, 2021, 2020, and 2019, is as follows (in thousands):

	<b>Operating Expenses</b>		
	<b>2021</b>	<b>2020</b>	<b>2019</b>
Source of supply	\$ 102	\$ 200	\$ 369
Power and pumping	45,167	40,705	42,746
Purification	62,334	61,778	67,790
Transmission and distribution	74,791	71,718	71,810
Customer accounting and collection	26,521	26,991	27,178
Administrative and general	14,933	13,913	12,990
Central services and general fund reimbursements	133,128	139,839	124,049
Pension expense	<u>(33,871)</u>	<u>(47,881)</u>	<u>70,335</u>
Operating expenses before depreciation and amortization	323,105	307,263	417,267
Depreciation and amortization	<u>86,877</u>	<u>82,495</u>	<u>79,870</u>
Total operating expenses	<u>\$ 409,982</u>	<u>\$ 389,758</u>	<u>\$ 497,137</u>

**2021**

Operating expenses before depreciation and amortization for the year ended 2021 increased by \$15.8 million (5.2%) from the year ended 2020 primarily due to increases in combined pension expenses of \$14.0 million, power and pumping of \$4.5 million and purification of \$3.0 million, offset by a decrease in central services and general fund reimbursement of \$6.7 million due to operational efficiencies.

**2020**

Operating expenses before depreciation and amortization for the year ended 2020 decreased by \$110.0 million (26.4%) from the year ended 2019 primarily due to decreases in pension expenses of \$118.2 million, and purification of \$6.0 million, offset by an increase in central services and general fund reimbursement of \$15.8 million.

Pension expense decreased by \$118.2 million (168.1%) in 2020 due to recognition of current year inflows due to changes in actuarial assumptions and reduction in the allocation of pension costs to the Water Fund compared to the Governmental and certain Enterprise Funds.

A comparative summary of the Water Fund's cash flows for the years ended December 31, 2021, 2020, and 2019, is as follows (in thousands of dollars):

	<b>Cash Flows</b>		
	<b>2021</b>	<b>2020</b>	<b>2019</b>
Cash from activities:			
Operating	\$ 394,110	\$ 337,767	\$ 357,969
Capital and related financing	(367,406)	(368,391)	(431,519)
Investing	<u>(56,280)</u>	<u>21,939</u>	<u>(156,921)</u>
Net change in cash and cash equivalents	(29,576)	(8,685)	(230,471)
Cash and cash equivalents:			
Beginning of year	<u>94,798</u>	<u>103,483</u>	<u>333,954</u>
End of year	<u>\$ 65,222</u>	<u>\$ 94,798</u>	<u>\$ 103,483</u>

### **2021**

As of December 31, 2021, the Water Fund's cash, and cash equivalents of \$65.2 million decreased by \$29.6 million from December 31, 2020, mainly due to the reduction in time to process accounts payable balances; offset by cash outflows of \$56.3 million from investing activities and \$367.4 million from capital and related financing activities mainly used in acquisition and construction of capital assets. Cash of \$24.7 million was provided by issuance of Illinois Environmental Protection Agency (IEPA) loans. Total cash and cash equivalents at December 31, 2021, are composed of unrestricted and restricted cash and cash equivalents of \$6.6 million and \$58.6 million, respectively.

### **2020**

As of December 31, 2020, the Water Fund's cash and cash equivalents of \$94.8 million decreased by \$8.7 million from December 31, 2019, mainly due to the cash provided of \$337.8 million from operating activities, offset by cash inflows of \$22.0 million from investing activities and \$368.4 million from capital and related financing activities mainly used in acquisition and construction of capital assets. Cash of \$40.9 million was provided by issuance of Illinois Environmental Protection Agency (IEPA) loans. Total cash and cash equivalents at December 31, 2020, are composed of unrestricted and restricted cash and cash equivalents of \$12.2 million and \$82.6 million, respectively.

## **UTILITY PLANT AND DEBT ADMINISTRATION**

### **2021**

At the end of 2021 and 2020, the Water Fund had \$5,128.5 million and \$5,064.6 million, respectively, invested in utility plant, net of accumulated depreciation. During 2021, the Water Fund expended \$179.7 million on capital activities. This included \$0.3 million for structures and improvements, \$31.0 million for distribution plant, \$1.4 million for equipment, and \$147.0 million for construction in progress.

During 2021, net completed projects totaling \$110.9 million were transferred from construction in progress to applicable capital accounts. The major completed project was installation and replacements of water mains (\$108.9 million).

**2020**

At the end of 2020 and 2019, the Water Fund had \$5,064.6 million and \$4,953.0 million, respectively, invested in utility plant, net of accumulated depreciation. During 2020, the Water Fund expended \$222.2 million on capital activities. This included \$9.6 million for land and land rights, \$0.1 million for structures and improvements, \$105.6 million for distribution plant, \$7.6 million for equipment, and \$99.3 million for construction in progress.

During 2020, net completed projects totaling \$67.8 million were transferred from construction in progress to applicable capital accounts. The major completed projects were standby power generators/replacement of electrical switchgear and west pumproom switchgear (\$55.1 million) and installation and replacements of water mains (\$11.3 million).

The Water Fund's utility plant at December 31, 2021, 2020, and 2019, is summarized as follows (in thousands):

	<b>Net Utility Plant at Year-End</b>		
	<b>2021</b>	<b>2020</b>	<b>2019</b>
Utility plant not depreciated:			
Land and land rights	\$ 16,483	\$ 16,483	\$ 6,858
Construction in progress	<u>451,161</u>	<u>431,409</u>	<u>417,223</u>
Total utility plant not depreciated	<u>467,644</u>	<u>447,892</u>	<u>424,081</u>
Utility plant being depreciated:			
Structures and improvements	609,850	608,407	607,575
Distribution plant	4,645,293	4,513,217	4,404,131
Equipment	<u>860,777</u>	<u>867,213</u>	<u>808,135</u>
Total utility plant being depreciated	6,115,920	5,988,837	5,819,841
Less accumulated depreciation:			
Structures and improvements	(263,848)	(255,697)	(246,868)
Distribution plant	(712,242)	(660,084)	(609,794)
Equipment	<u>(478,974)</u>	<u>(456,375)</u>	<u>(434,234)</u>
Total accumulated depreciation	<u>(1,455,064)</u>	<u>(1,372,156)</u>	<u>(1,290,896)</u>
Total utility plant being depreciated—net	<u>4,660,856</u>	<u>4,616,681</u>	<u>4,528,945</u>
Total utility plant—net	<u>\$ 5,128,500</u>	<u>\$ 5,064,573</u>	<u>\$ 4,953,026</u>

The Water Fund's capital activities are funded through Water Fund revenue bonds, Illinois Environmental Protection Agency (IEPA) loans and Water Fund revenue. Additional information on the Water Fund's capital assets is presented in Note 5 of the notes to basic financial statements.

The Water Fund's long-term liabilities at December 31, 2021, 2020, and 2019, are summarized as follows (in thousands):

	<b>Long-Term Liabilities at Year-End</b>		
	<b>2021</b>	<b>2020</b>	<b>2019</b>
Revenue bonds and notes payable	\$ 2,341,421	\$ 2,408,774	\$ 2,497,156
Add:			
Bond discount/premium	<u>132,072</u>	<u>148,935</u>	<u>166,916</u>
Total revenue bonds/notes payable—net	2,473,493	2,557,709	2,664,072
Less current bonds/notes payable	<u>(110,324)</u>	<u>(104,492)</u>	<u>(99,172)</u>
Total long-term revenue bonds/notes payable—net	2,363,169	2,453,217	2,564,900
Water pipe extension certificates	<u>1,577</u>	<u>1,577</u>	<u>1,577</u>
Total long-term liabilities	<u>\$ 2,364,746</u>	<u>\$ 2,454,794</u>	<u>\$ 2,566,477</u>

Additional information on the Water Fund's long-term debt is presented in Note 4 of the notes to basic financial statements.

The Water Fund's revenue bonds at December 31, 2021, have underlying credit ratings with each of the four major rating agencies as follows:

	<b>Moody's</b>	<b>Standard &amp; Poor's</b>	<b>Fitch Ratings</b>	<b>Kroll</b>
Second Lien Water Revenue Bonds	Baa2	A	A-	AA

In July 2021, Moody's revised the outlook for the Water Second Lien Bonds from negative to stable.

In December 2021, Fitch Ratings revised the outlook for the Water Second Lien Bonds from negative to stable.

At December 31, 2021, the Water Fund was in compliance with the debt covenants as stated within the bond ordinances. Additional information on certain of the Water Fund's debt covenants is presented in Note 4 of the notes to the basic financial statements.

### **Requests for Information**

This financial report is designed to provide the reader with a general overview of the Water Fund's finances. Questions concerning any of the information provided in this report, or requests for additional financial information, should be addressed to the City of Chicago Department of Finance.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATEMENTS OF NET POSITION  
AS OF DECEMBER 31, 2021 AND 2020  
(In thousands)**

	2021	2020		2021	2020
<b>ASSETS</b>			<b>LIABILITIES</b>		
CURRENT ASSETS:			CURRENT LIABILITIES:		
Cash and cash equivalents (Note 2)	\$ 6,655	\$ 12,231	Accounts payable	\$ 29,668	\$ 25,014
Investments (Note 2)	463,554	416,247	Due to other City funds	51,604	18,270
Accounts receivable—net of allowance for doubtful accounts of approximately \$215,269 in 2021 and \$207,319 in 2020	197,920	183,431	Accrued liabilities	201,634	215,797
Interest receivable	2,404	1,178	Liabilities payable from restricted assets:		
Due from other City funds	51,432	49,805	Accounts payable	32,568	52,495
Inventories	22,056	20,164	Interest payable	18,557	18,981
Cash and cash equivalents—restricted	58,567	82,567	Current portion of long-term debt (Note 4)	<u>110,324</u>	<u>104,492</u>
Investments—restricted	102,879	93,393			
Interest receivable—restricted	<u>3</u>	<u>8</u>	Total current liabilities	<u>444,355</u>	<u>435,049</u>
Total current assets	• 905,470	859,024	NONCURRENT LIABILITIES:		
NONCURRENT ASSETS:			Long-term debt—net of current maturities (Note 4)	2,363,169	2,453,217
Other assets	<u>2,268</u>	<u>2,442</u>	Net pension liability (Note 6)	1,153,675	1,158,733
Utility plant (Note 5):			Water pipe extension certificates	<u>1,577</u>	<u>1,577</u>
Land and land rights	16,483	16,483	Total noncurrent liabilities	<u>3,518,421</u>	<u>3,613,527</u>
Structures and improvements	609,850	608,407	Total liabilities	<u>3,962,776</u>	<u>4,048,576</u>
Distribution plant	4,645,293	4,513,217	DEFERRED INFLOWS (Note 9)	<u>116,259</u>	<u>205,620</u>
Equipment	860,777	867,213	NET POSITION (Note 1):		
Construction in progress	<u>451,161</u>	<u>431,409</u>	Net investment in capital assets	2,746,413	2,574,298
Total utility plant	6,583,564	6,436,729	Restricted for capital projects	3	8
Less accumulated depreciation	<u>(1,455,064)</u>	<u>(1,372,156)</u>	Unrestricted	<u>(744,898)</u>	<u>(845,892)</u>
Utility plant—net	<u>5,128,500</u>	<u>5,064,573</u>	Total net position	<u>2,001,518</u>	<u>1,728,414</u>
Total noncurrent assets	5,130,768	5,067,015	TOTAL	<u>\$6,080,553</u>	<u>\$5,982,610</u>
DEFERRED OUTFLOWS (Note 9)	<u>44,315</u>	<u>56,571</u>			
TOTAL ASSETS AND DEFERRED OUTFLOWS	<u>\$ 6,080,553</u>	<u>\$ 5,982,610</u>			

See notes to basic financial statements.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION  
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020  
(In thousands)**

	<b>2021</b>	<b>2020</b>
<b>OPERATING REVENUES:</b>		
Water sales:		
Water sales	\$ 763,802	\$ 743,771
Less provision for doubtful accounts	<u>(15,212)</u>	<u>(29,461)</u>
Water sales—net	748,590	714,310
Other operating revenues	<u>27,135</u>	<u>22,268</u>
Total operating revenues	<u>775,725</u>	<u>736,578</u>
<b>OPERATING EXPENSES:</b>		
Source of supply	102	200
Power and pumping	45,167	40,705
Purification	62,334	61,778
Transmission and distribution	74,791	71,718
Customer accounting and collection	26,521	26,991
Administrative and general	14,933	13,913
Central services and general fund reimbursements	133,128	139,839
Pension expense (Note 6)	<u>(33,871)</u>	<u>(47,881)</u>
Total operating expenses before depreciation and amortization	<u>323,105</u>	<u>307,263</u>
<b>OPERATING INCOME BEFORE DEPRECIATION AND AMORTIZATION</b>	452,620	429,315
<b>DEPRECIATION AND AMORTIZATION</b>	<u>86,877</u>	<u>82,495</u>
<b>OPERATING INCOME</b>	<u>365,743</u>	<u>346,820</u>
<b>NONOPERATING REVENUES (EXPENSES):</b>		
Interest income	1,734	17,033
Interest expense	(93,990)	(95,895)
Other	<u>2,037</u>	<u>4,674</u>
Total nonoperating expenses—net	<u>(90,219)</u>	<u>(74,188)</u>
<b>TRANSFERS OUT</b>	<u>(2,420)</u>	<u>(2,420)</u>
<b>CHANGE IN NET POSITION</b>	273,104	270,212
<b>TOTAL NET POSITION—Beginning of year</b>	<u>1,728,414</u>	<u>1,458,202</u>
<b>TOTAL NET POSITION—End of year</b>	<u>\$ 2,001,518</u>	<u>\$ 1,728,414</u>

See notes to basic financial statements.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020  
(In thousands)**

	<b>2021</b>	<b>2020</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Received from customers	\$ 761,236	\$ 731,199
Transactions with other City funds	(109,710)	(132,473)
Payments to vendors	(103,973)	(114,867)
Payments to employees	<u>(153,443)</u>	<u>(146,092)</u>
Net cash provided by operating activities	<u>394,110</u>	<u>337,767</u>
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Acquisition and construction of capital assets	(180,690)	(198,918)
Interest paid	(108,960)	(113,208)
Proceeds from issuance of bonds and IEPA loans	24,699	40,880
Principal paid on bonds	(104,492)	(99,399)
Construction reimbursements	<u>2,037</u>	<u>2,254</u>
Net cash used in capital and related financing activities	<u>(367,406)</u>	<u>(368,391)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Sales and purchases of investments—net	(62,573)	11,561
Investment interest	<u>6,293</u>	<u>10,378</u>
Net cash (Used in) provided by investing activities	<u>(56,280)</u>	<u>21,939</u>
<b>NET CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>(29,576)</b>	<b>(8,685)</b>
<b>CASH AND CASH EQUIVALENTS—Beginning of year</b>	<b><u>94,798</u></b>	<b><u>103,483</u></b>
<b>CASH AND CASH EQUIVALENTS—End of year</b>	<b><u>\$ 65,222</u></b>	<b><u>\$ 94,798</u></b>
<b>RECONCILIATION OF CASH AND CASH EQUIVALENTS REPORTED IN THE STATEMENTS OF NET POSITION:</b>		
Unrestricted	\$ 6,655	\$ 12,231
Restricted	<u>58,567</u>	<u>82,567</u>
<b>TOTAL</b>	<b><u>\$ 65,222</u></b>	<b><u>\$ 94,798</u></b>

(Continued)



**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020  
(In thousands)**

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	<b>2021</b>	<b>2020</b>
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:		
Operating income	\$ 365,743	\$ 346,820
Adjustments to reconcile:		
Depreciation and amortization	86,877	82,495
Pension expense other than contribution	(84,160)	(92,258)
Provision for doubtful accounts	15,212	29,461
Changes in assets and liabilities:		
Accounts receivable	(29,701)	(18,535)
Inventories	(1,892)	(569)
Due from other City funds	(4,047)	(6,461)
Unrestricted accounts payable	4,654	(2,549)
Due to other City funds	33,334	7,768
Accrued liabilities	8,090	7,900
Unearned revenue	<u>-</u>	<u>(16,305)</u>
NET CASH PROVIDED BY OPERATING ACTIVITIES	<u>\$ 394,110</u>	<u>\$ 337,767</u>

SUPPLEMENTAL DISCLOSURE OF NONCASH ITEMS—Property additions in 2021 and 2020 of \$32,568 and \$52,495, respectively, are in accounts payable.

The fair value adjustment (loss)/gain to investments for 2021 and 2020 were (\$658.2) and \$5,122, respectively.

See notes to basic financial statements.

(Concluded)

# CITY OF CHICAGO, ILLINOIS

## WATER FUND

### NOTES TO BASIC FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

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#### 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Organization**—The Water Fund (“Water Fund”) purifies and provides Lake Michigan water for the City of Chicago, Illinois (the “City”) and approximately 125 suburbs. The Water Fund is included in the City’s reporting entity as an enterprise fund.

The accompanying basic financial statements present only the Water Fund and are not intended to present the financial position of the City, and the results of its operations and cash flows.

**Basis of Accounting**—The accounting policies of the Water Fund are based upon accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board (GASB). The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The accounts of the Water Fund are reported using the flow of economic resources measurement focus.

The Water Fund uses the accrual basis of accounting under which revenues are recognized when earned and expenses are recognized when the liability is incurred.

When both restricted and unrestricted resources are available for use, it is the City’s policy to use restricted resources first, then unrestricted resources, as they are needed.

**Annual Appropriated Budget**—The Water Fund has a legally adopted annual budget, which is not required to be reported.

**Management’s Use of Estimates**—The preparation of basic financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the basic financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Cash, Cash Equivalents, and Investments**—Cash, cash equivalents, and investments generally are held with the City Treasurer as required by the Municipal Code of Chicago (the “Code”). Interest earned on pooled investments is allocated to participating funds based upon their average combined cash and investment balances. Due to contractual agreements or legal restrictions, the cash and investments of certain funds are segregated and earn and receive interest directly.

The Code permits deposits only to City Council-approved depositories, which must be organized state or national banks and federal and state savings and loan associations, located within the City, whose deposits are federally insured.

Investments are limited to those authorized by the Code. Investments authorized by the Code include, but are not limited to, interest-bearing general obligations of the City, State of Illinois (the “State”), and the U.S. government; U.S. Treasury bills and other non-interest-bearing general obligations of the U.S.

government purchased in the open market below face value; domestic money market funds regulated by and in good standing with the Securities and Exchange Commission; and tax anticipation warrants issued by the City (see Note 2). The City is prohibited by ordinance from investing in derivative instruments, as defined, without City Council approval.

The Water Fund values its investments at fair value or amortized cost as applicable. U.S. government securities purchased at a price other than par with a maturity of less than one year are reported at amortized cost.

Repurchase agreements can be purchased only from banks and certain other institutions authorized to do business in the State. The City Treasurer requires that securities pledged to secure these agreements have a fair value equal to the cost of the repurchase agreements, plus accrued interest.

Investments generally may not have a maturity in excess of 30 years from the date of purchase. Certain other investment balances are held in accordance with the specific provisions of applicable bond ordinances.

Cash equivalents include certificates of deposit and other investments with maturities of three months or less when purchased.

**Accounts Receivable**—The Water Fund’s accounts receivable is comprised of billings and collections for water services processed by the Department of Water Management. Management has provided an allowance for amounts recorded at year-end that may be uncollectible. In 2021 the Water Fund fully implemented the UBR Program, providing financial relief to low-income household by establishing payment plans and writing off past due legacy accounts receivable balances upon completion of the Program. The impact of this program was realized in 2021, resulting in a decrease in the provision for doubtful accounts.

**Transactions with the City**—The City’s General Fund provides services to all other funds. The amounts allocated to other funds for these services are treated as operating expenses by the Water Fund and consist mainly of employee benefits, self-insured risks, and administrative expenses.

**Inventories**—Inventories, composed mainly of materials and supplies, are stated at cost, determined principally on the average cost method.

**Utility Plant**—Utility plant is recorded at cost or, for donated assets at acquisition value. Utility plant is defined by the Water Fund as assets with an initial cost of more than \$5,000 and an estimated useful life in excess of two years. Such assets are recorded at historical cost. Depreciation is provided using the straight-line method and begins in the year following the year of acquisition or completion. Estimated useful lives are as follows:

Structures and improvements	50–100 years
Distribution plant	25–100 years
Equipment	6–33 years

Costs of repairs and maintenance that do not significantly extend the useful life of assets are charged to operations.

**Deferred Outflows**—Deferred outflows represent unamortized loss on bond refunding, the differences between estimated and actual investment earnings related to pensions, and changes in actuarial assumptions related to pensions.

**Deferred Inflows**—Deferred inflows represent the differences between projected and actual actuarial experience and changes in assumptions related to pensions.

**Net Position**—Net position is composed of net earnings from operating and nonoperating revenues, expenses, and capital grants. Net position is displayed in three components—net investment in capital assets, restricted for capital projects, and unrestricted. Net investment in capital assets consists of all capital assets, net of accumulated depreciation and reduced by outstanding debt, net of debt service reserve, and unspent bond proceeds. Restricted for capital projects consist of assets for which constraints are placed thereon by external parties (such as lenders and grantors) and laws, regulations, and enabling legislation reduced by liabilities and deferred inflows of resources related to those assets. Unrestricted consists of the net amount of all other assets, deferred outflows, liabilities, and deferred inflows not categorized as either of the above.

**Employee Benefits**—Employee benefits are granted for vacation and sick leave, workers' compensation, and health care. Unused vacation leave is accrued and may be carried over for one year. Sick leave is accumulated at the rate of one day for each month worked, up to a maximum of 200 days. Severance of employment terminates all rights to receive compensation for any unused sick leave. Sick leave pay is not accrued. Employee benefit claims outstanding, including claims incurred but not reported, are estimated and recorded as liabilities.

Employees are eligible to defer a portion of their salaries until future years under the City's deferred compensation plan created in accordance with Internal Revenue Code Section 457. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. The plan is administered by third-party administrators, who maintain the investment portfolio. The plan's assets have been placed in trust accounts with the plan administrators for the exclusive benefit of participants and their beneficiaries and are not considered assets of the City.

The City is subject to the State Unemployment Compensation Act and has elected the reimbursing employer option for providing unemployment insurance benefits for eligible former employees. Under this option, the City reimburses the State for claims paid by the State.

**Bond Insurance Costs, Bond Premiums, Discounts, and Refunding Transactions**—Bond insurance, bond premiums, and bond discounts are deferred and amortized over the term of the related debt, except in the case of refunding debt transactions where the amortization period is over the term of the refunding or refunded debt, whichever is shorter.

**Capitalized Interest**—The Water Fund prospectively adopted GASB 89, *Accounting for Interest Cost Incurred before the End of a Construction Period* ("GASB 89") as of January 1, 2021. Prior to the adoption of GASB 89, interest expense was capitalized during construction of those capital projects that were paid for from the bond proceeds and were being amortized over the depreciable life of the related assets on a straight-line basis. Subsequent to the adoption of GASB 89, interest expense on construction bond proceeds was expensed as incurred.

**Revenue Recognition**—Revenue from water sales is recognized when the water is consumed by customers. Of the accounts receivable balances, \$78.7 million and \$75.2 million represent revenue recognized on water sales, which had not yet been billed to customers at December 31, 2021 and 2020, respectively. In 2020, the Water Fund changed its billing for unmetered accounts from billing every 6 months in advance to monthly billing, which eliminated the recording of unearned revenue.

**Revenues and Expenses**—The Water Fund distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and

producing and delivering goods in connection with the Water Fund’s principal ongoing operations. The principal operating revenues of the Water Fund are charges to customers for sales and services.

Operating expenses include the cost of sales and services, pension expense, administrative expenses, and depreciation and amortization on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

**Debt**—Debt is defined as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. For disclosure purposes, debt does not include leases, except for contracts reported as financed purchase of the underlying asset, or accounts payable.

**Adopted Accounting Standards—**

GASB Statement	Impact
GASB Statement No. 89, <i>Accounting for Interest Cost Incurred before the End of a Construction Period</i> (“GASB 89”)	Establishes accounting requirements for interest cost incurred before the end of a construction period. As previously stated, the Water Fund prospectively adopted GASB 89 as of and for the year ended December 31, 2021. Adoption of this Statement did not have material impact to the basic financial statements.
GASB Statement No. 92, <i>Omnibus 2020</i> (“GASB 92”)	Clarifies multiple financial reporting topics included in multiple GASB statements. The Water Fund adopted GASB 92 as of and for the year ended December 31, 2021. There was no material impact to the basic financial statements upon adoption.
GASB Statement No. 99, <i>Omnibus 2022</i> (“GASB 99”)	Clarifies multiple financial reporting topics included in multiple GASB statements. Certain portions of the statement are effective and implemented for the year ended December 31, 2021, including: extension of the use of LIBOR, accounting for SNAP distributions, disclosures of nonmonetary transactions, pledges of future revenues by pledging governments, clarification of certain provisions in Statement 34, as amended, and terminology updates related to Statement 53 and Statement 63. There was no material impact to the basic financial statements upon adoption. The remainder of the statement is applicable to the years ended December 31, 2023, and December 31, 2024, as noted below.

**Upcoming Accounting Standards**—GASB has issued the following pronouncements that may affect the future financial position, results of operations, cash flows, or financial presentation of the Water Fund upon implementation. Management has not yet evaluated the effect of implementation of these standards.

<b>GASB Accounting Standard</b>	<b>Required Year of Adoption</b>
GASB Statement No. 87, <i>Leases</i> (“GASB 87”)	2022
GASB Statement No. 91, <i>Conduit Debt Obligations</i> (“GASB 91”)	2022
GASB Statement No. 93, <i>Replacement of Interbank Offered Rates</i> (“GASB 93”)	2022
GASB Statement No. 94, <i>Public-Private and Public-Public Partnerships and Availability Payment Arrangements</i> (“GASB 94”)	2023
GASB Statement No. 96, <i>Subscription-based Information Technology Arrangements</i> (“GASB 96”)	2023
GASB Statement No. 97, <i>Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans</i> (“GASB 97”) – Remaining provisions.	2022
GASB Statement No. 99, <i>Omnibus 2022</i> (“GASB 99”) —Remaining provision.	2023 & 2024
GASB Statement No. 100, <i>Accounting Changes and Error Corrections—An Amendment of GASB Statement No. 62</i>	2024
GASB Statement No. 101, <i>Compensated Absences</i>	2024

## 2. RESTRICTED AND UNRESTRICTED CASH EQUIVALENTS AND INVESTMENTS

**Cash Equivalents and Investments**—The Water Fund’s cash equivalents and investments as of December 31, 2021, are as follows (in thousands):

	<b>Maturities (In Years)</b>				<b>Fair Value</b>
	<b>Less Than 1</b>	<b>1–5</b>	<b>6–10</b>	<b>More Than 10</b>	
Agency bonds	\$ -	\$ 3,976	\$ -	\$ -	\$ 3,976
Commercial paper	237,771	-	-	-	237,771
Money market funds	5,039	-	-	-	5,039
Corporate bonds	35,999	47,518	117,397	31,043	231,957
Municipal bonds	-	24,074	34,442	12,276	70,792
Corporate ABS	-	28,177	-	-	28,177
Agency MBS	-	-	-	21,007	21,007
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Total	<u>\$ 278,809</u>	<u>\$ 103,745</u>	<u>\$ 151,839</u>	<u>\$ 64,326</u>	<u>\$ 598,719</u>

**Cash Equivalents and Investments**—The Water Fund’s cash equivalents and investments as of December 31, 2020, are as follows (in thousands):

	<b>Maturities (In Years)</b>				<b>Fair Value</b>
	<b>Less Than 1</b>	<b>1–5</b>	<b>6–10</b>	<b>More Than 10</b>	
U.S. agencies	\$ -	\$ 501	\$ -	\$ -	\$ 501
Commercial paper	359,019	-	-	-	359,019
Certificates of deposit and other short-term	8,606	-	-	-	8,606
Corporate bonds	10,119	29,463	-	27,315	66,897
Municipal bonds	12,550	27,812	36,205	-	76,567
Supranational bank	-	-	-	-	-
Asset backed securities	28,069	36,819	-	38,901	103,789
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
Total	<u>\$ 418,363</u>	<u>\$ 94,595</u>	<u>\$ 36,205</u>	<u>\$ 66,216</u>	<u>\$ 615,379</u>

**Investment Fair Value Measurements**—The City categorizes the fair value measurements of its investments based the hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation techniques used to measure fair value.

**Level 1**—Inputs are unadjusted quoted prices in active markets for identical assets

**Level 2**—Observable inputs other than quoted market prices, and

**Level 3**—Unobservable Inputs

The investments measured at fair value as of December 31, 2021 and 2020, were (in thousands):

	2021			2020		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Agency bonds	\$ -	\$ 3,976	\$ -	\$ -	\$ 501	\$ -
Agency MBS	-	21,007	-	-	-	-
Corporate bonds	-	218,964	-	-	66,897	-
Municipal bonds	-	70,792	-	-	70,355	-
Corporate ABS	-	28,177	-	-	103,789	-
	<u>\$ -</u>	<u>\$ 342,916</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 241,542</u>	<u>\$ -</u>

Investments that are valued through other observable inputs (Level 2), are valued using methods that include, but are not limited to, model processes, benchmark curves, benchmarking of like securities, sector groupings, and matrix pricing.

U.S. agencies include investments in government-sponsored enterprises, such as Federal National Mortgage Association, Federal Home Loan Banks, and Federal Home Loan Mortgage Corp.

Money market investments and participating interest-earning investment contracts that have a remaining maturity at the time of purchase of one year or less and are held by governments other than the external investment pools are measured at amortized cost and are not reflected in the table above. The total of these investments at amortized cost for the Water Fund are \$255.8 million and \$373.8 million as of December 31, 2021 and 2020, respectively.

**Interest Rate Risk**—As a means of limiting its exposure to fair value losses arising from rising interest rates, the City’s investment policy requires that investments generally may not have a maturity date in excess of 30 years from the date of purchase. Certain other investments are held in accordance with the specific provisions of applicable ordinances.

**Credit Risk**—With regard to credit risk, the Code limits the investments in securities to:

- 1) Interest-bearing general obligations of the United States and the State of Illinois;
- 2) United States treasury bills and other non-interest-bearing general obligations of the United States or United States government agencies when offered for sale at a price below the face value of same, so as to afford the city a return on such investment in lieu of interest;
- 3) Tax anticipation warrants, municipal bonds, notes, commercial paper or other instruments representing a debt obligation issued by the City of Chicago;
- 4) Commercial paper which: (1) at the time of purchase, is rated in the two highest classifications by at least two accredited ratings agencies; and (2) matures not more than 270 days after the date of purchase;
- 5) Reverse repurchase agreement if: (1) the term does not exceed 90 days; and (2) the maturity of the investment acquired with the proceeds of the reverse repurchase agreement does not exceed the expiration date of the reverse repurchase agreement. Reverse repurchase agreements may be transacted with primary dealers and financial institutions, provided that the City has on file a master repurchase agreement;



- 6) Certificates of deposit of banks or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance or demand deposits in banks or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance; provided that any amount of the deposit in excess of the federal deposit insurance shall be collateralized as noted in Custodial Credit Risk—Cash and Certificates of Deposit below;
- 7) Bankers acceptance of banks whose senior obligations, at the time of purchase, are rated in either the AAA or AA rating categories by at least two accredited ratings agencies;
- 8) Tax-exempt securities exempt from federal arbitrage provisions applicable to investments of proceeds of the City's tax-exempt debt obligations;
- 9) Domestic money market mutual funds regulated by and in good standing with the Securities and Exchange Commission; provided that such money market mutual funds' portfolios are limited to investments authorized by this section;
- 10) Any other suitable investment instrument permitted by state laws governing municipal investments generally, subject to the reasonable exercise of prudence in making investments of public funds;
- 11) Except where otherwise restricted or prohibited, a non-interest-bearing savings account, non-interest-bearing checking account or other non-interest-bearing demand account established in a national or state bank, or a federal or state savings and loan association, when, in the determination of the treasurer, the placement of such funds in the non-interest bearing account is used as compensating balances to offset fees associated with that account that will result in cost savings to the City;
- 12) Bonds of companies organized in the United States with assets exceeding \$500.0 million that, at the time of purchase, are rated investment grade by at least two accredited ratings agencies;
- 13) Debt instruments of international financial institutions, including but not limited to the World Bank and the International Monetary Fund, that, at the time of purchase, are rated within 4 intermediate credit ratings of the United States sovereign credit rating by at least two accredited ratings agencies, but not less than an A-rating, or equivalent rating. For purposes of this subsection, an "international financial institution" means a financial institution that has been established or chartered by more than one country and the owners or shareholders are generally national governments or other international institutions such as the United Nations;
- 14) United States dollar denominated debt instruments of foreign sovereignties that, at the time of purchase, are rated within four intermediate credit ratings of the United States sovereign credit rating by at least two accredited ratings agencies, but not less than an A- rating or equivalent rating;
- 15) Interest-bearing bonds of any county, township, city, village, incorporated town, municipal corporation, or school district, of the State of Illinois, of any other state, or of any political subdivision or agency of the State of Illinois or of any other state, whether the interest earned thereon is taxable or tax-exempt under federal law. The bonds shall be registered in the name of the city or held under a custodial agreement at a bank. The bonds shall be rated, at the time of purchase, not less than A-, or equivalent rating, by at least two accredited rating agencies with nationally recognized expertise in rating bonds of states and their political subdivisions;

16) Bonds registered and regulated by the Securities and Exchange Commission and for which the full faith and credit of the State of Israel is pledged for payment; provided that the bonds have an A-rating or above or equivalent rating by at least two accredited ratings agencies;

17) Bonds, notes, debentures, or other similar obligations of agencies of the United States.

Total holdings across all funds held by the Water Fund shall have no less than an overall average rating of Aa on a quarterly basis, as rated by two accredited rating agencies. A schedule summarizing the Water Fund’s exposure to credit risk as of December 31, 2021 and 2020, is as follows (in thousands):

Quality Rating	2021	2020
A/A	\$ 30,393	\$ 26,049
Aa/AA	52,828	55,806
Aaa/AAA*	148,640	174,483
Baa/BBB	129,087	-
P1/A1	186,971	133,427
P2/A2	50,800	225,592
Not rated	-	22
	<u>          </u>	<u>          </u>
Total	<u>\$ 598,719</u>	<u>\$ 615,379</u>

**Custodial Credit Risk—Cash and Certificates of Deposit—**This is the risk that in the event of a bank failure, the City’s Deposits may not be returned. The City’s Investment Policy states that to protect the City public fund deposits, depository institutions are to maintain collateral pledges on City deposits and certificates of deposit during the term of the deposit.

For certificates of deposit of banks or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance, or demand deposits in bank or savings and loan associations designated as municipal depositories which are insured by federal deposit insurance; provided that any amount of the deposit in excess of the federal deposit insurance shall be either: (1) fully collateralized at least 100% by: (i) marketable U.S. government securities marked to market at least monthly; (ii) bonds, notes, or other securities constituting the direct and general obligation of any agency or instrumentality of the United States; or (iii) bonds, notes or other securities constituting a direct and general obligation of any county, township, city, village, incorporated town, municipal corporation, or school district, of the State of Illinois or of any other state, or of any political subdivision or agency of the State of Illinois or any other state which are rated in either the AAA or AA rating categories by at least two accredited ratings agencies and maintaining such rating during the term of such investments; (2) secured by a corporate surety bond issued by an insurance company licensed to do business in Illinois and having a claims-paying rating in the top rating category as rated by a nationally recognized statistical rating organization and maintaining such rating during the term of such investment; or (3) fully collateralized at least 100% by an irrevocable letter of credit issued in favor of the City of Chicago by the Federal Home Loan Bank, provided that the Federal Home Loan Bank’s short-term debt obligations are rated in the highest rating category by at least one accredited ratings agency throughout the term of the certificate of deposit or deposit.

The collateral required to secure City funds must be held in safekeeping and pursuant to collateral agreements which would prohibit release or substitution of pledged assets without proper written notification and authorization of the City Treasurer. The final maturity of acceptable collateral pledged shall not exceed 120 months.

The bank balance of cash and certificates of deposit with the City’s various municipal depositories was \$107.1 million. 96.6% of the bank balance was either insured or collateralized with securities held by City agents in the City’s name. \$3.6 million was uncollateralized at December 31, 2021, and thus was subject to custodial credit risk.

Investments reported in the basic financial statements as of December 31, 2021 and 2020, are summarized as follows (in thousands):

	<b>2021</b>	<b>2020</b>
Per Note 2:		
Investments—Water Fund	<u>\$ 598,719</u>	<u>\$ 615,379</u>
Per financial statements:		
Restricted investments—current	\$ 102,879	\$ 93,393
Unrestricted investments	463,554	416,247
Investments included as cash and cash equivalents on the statements of net position	<u>32,286</u>	<u>105,739</u>
	<u>\$ 598,719</u>	<u>\$ 615,379</u>

### 3. RESTRICTED ASSETS AND ACCOUNTS

Water sales are pledged to pay outstanding Water Revenue Bonds. The ordinances authorizing the issuance of outstanding Water Revenue Bonds provide for the creation of separate accounts into which net revenues, as defined, or proceeds are to be credited, are as follows:

Water Revenue Bonds, Series 2000 and 1997 (“Senior Lien Revenue Bonds”):

**Bond Principal and Interest Account**—No later than 10 days prior to each principal or interest payment date, an amount sufficient to pay principal, redemption premium, if any, and interest becoming due, whether upon maturity, redemption, or otherwise.

**Bond Debt Service Reserve Account**—For each series, an amount equal to the least of (i) the maximum annual debt service requirement; (ii) 10% of the original principal amount less original issue discount; or (iii) 125% of the average annual debt service requirement. The required balance of the Series 2000, 1997, 1995, and 1993 bonds was met by the purchase of surety bonds. The required balance of the Series 2001 Second Lien Revenue Bonds is being met with a deposit of a portion of the proceeds of the Series 2001 Senior Lien Revenue Bonds.

**Construction Account**—Certain proceeds of the Senior Lien Revenue Bonds were deposited in this account for the purpose of paying construction costs of projects as defined in the ordinance.

Water Revenue Bonds, Series 2000, 2008, 2010A, 2010B, 2010C, 2012, 2014, 2016A-1, and Refunding Bonds, Series 2004 and 2001, 2017, 2017-2 (“Second Lien Revenue Bonds”):

**Principal and Interest Account**—Deposits are required to be transferred no later than the business day preceding each May 1 and November 1, in an amount sufficient to pay principal and interest as due on outstanding Second Lien Revenue Bonds.

**Second Lien Bonds Account**—On the date of issuance of any series of Second Lien Revenue Bonds that bear interest at a variable rate paying interest more than semiannually, an amount equal to the interest payable during a six-month period will be transferred to a restricted account. The amount transferred will be calculated based on the maximum rate payable on such bonds.

**Water Rate Stabilization Account**—Any net revenues remaining after providing sufficient funds for all required deposits in the Water Revenue Bonds accounts may be transferred to the water rate stabilization account upon the direction of the City to be used for any lawful purpose of the Water Fund.

For accounts established by ordinances with balances, the amounts at December 31, 2021 and 2020, are as follows (in thousands):

	<b>2021</b>	<b>2020</b>
Second Lien Revenue Bonds	\$ 37,127	\$ 30,303
Water rate stabilization	91,754	93,170
Construction	<u>32,568</u>	<u>52,495</u>
Total	<u>\$ 161,449</u>	<u>\$ 175,968</u>

The 2021 and 2020 Water rate stabilization balance above includes a fair value adjustment of \$0.6 million and \$2.0 million, respectively.

At December 31, 2021 and 2020, management is not aware of any instances of noncompliance with the funding requirements and restrictions on assets as stated in the ordinances.

#### 4. LONG-TERM DEBT

Long-term debt as of December 31, 2021 and 2020, consisted of the following (in thousands):

	2021	2020
\$100,000 Series 2000 Second Lien Water Revenue Bonds, issued December 22, 1999, due 2030, converted to fixed rate on May 23, 2016; interest rate; interest at 5.0%	\$ 100,000	\$ 100,000
\$81,500 Series 2001 Second Lien Water Revenue Refunding Bonds, issued December 13, 2001, due 2030; interest at 3.0% to 5.75%	80,430	80,500
\$2,643 Illinois Environmental Protection Agency Loan Agreement, signed June 30, 2003, due 2025; interest at 2.57%	662	817
\$3,605 Illinois Environmental Protection Agency Loan Agreement, signed October 16, 2003, due 2022; interest at 2.905%	238	469
\$344,575 Series 2004 Second Lien Water Revenue Refunding Bonds, issued August 5, 2004, due through 2027, converted to fixed rate on May 23, 2016, interest at 2.0% to 5.0%	213,090	251,615
\$549,915 Series 2008 Second Lien Water Revenue Bonds, issued April 16, 2008, due through 2038; interest at 4.0% to 5.25%	55,615	59,820
\$313,580 Series 2010A-C Second Lien Water Revenue Bonds, issued November 10, 2010, due through 2040; interest at 2.0% to 6.742%	292,740	300,355
\$6,000 Illinois Environmental Protection Agency Loan Agreement, signed January 21, 2011, due 2031; interest at 1.25%	3,187	3,484
\$9,077 Illinois Environmental Protection Agency Loan Agreement, signed February 2, 2010, due 2031; noninterest bearing	4,559	5,015
\$399,445 Series 2012 Second Lien Water Revenue Bonds, issued May 17, 2012, due through 2042; interest at 4.0% to 5.0%	347,705	357,310
\$1,528 Illinois Environmental Protection Agency Loan Agreement, signed July 8, 2010, due 2032; interest at 1.25%	897	974
\$1,502 Illinois Environmental Protection Agency Loan Agreement, signed September 15, 2013, due 2032; interest at 1.25%	892	967
\$6,092 Illinois Environmental Protection Agency Loan Agreement, signed October 25, 2013, due 2032; interest at 1.25%	3,617	3,922
\$6,542 Illinois Environmental Protection Agency Loan Agreement, signed May 27, 2014, due 2034; interest at 2.295%	4,431	4,734

(Continued)

	<b>2021</b>	<b>2020</b>
\$39,422 Illinois Environmental Protection Agency Loan Agreement, signed August 5, 2013, due 2034; interest at 1.93%	\$ 27,376	\$ 29,207
\$15,000 Illinois Environmental Protection Agency Loan Agreement, signed September 19, 2013, due 2034; interest at 1.93%	10,447	11,142
\$47,000 Illinois Environmental Protection Agency Loan Agreement, signed March 3, 2014, due 2035; interest at 1.995%	33,789	35,944
\$15,058 Illinois Environmental Protection Agency Loan Agreement, signed October 15, 2014, due 2035; interest at 1.995%	11,029	11,734
\$367,925 Series 2014 Second Lien Water Revenue Bonds, issued September 17, 2014, due 2044; interest at 3.0% to 5.0%	322,555	330,140
\$59,595 Series 2016A-1 Tax-Exempt Second Lien Water Revenue Bonds, issued May 23, 2016, due 2031; interest at 4.0% to 5.0%	59,595	59,595
\$62,179 Illinois Environmental Protection Agency Loan Agreement, signed May 18, 2016, due 2036; interest at 2.21%	48,843	51,671
\$44,668 Illinois Environmental Protection Agency Loan Agreement, signed May 27, 2014, due 2037; interest at 1.995%	37,245	39,203
\$19,584 Illinois Environmental Protection Agency Loan Agreement, signed November 17, 2015, due 2036; interest at 1.86%	15,399	16,316
\$199,355 Series 2017 Refunding Bonds, issued June 22, 2017, due 2036; interest at 5.0% to 5.25%	172,885	178,240
\$235,260 Series 2017-2 Refunding Bonds, issued December 21, 2017, due 2038; interest at 5.0%	197,255	202,670
\$81,147 Illinois Environmental Protection Agency Loan Agreement, signed June 3, 2016 due 2037; interest at 1.86%	68,653	72,306
\$40,782 Illinois Environmental Protection Agency Loan Agreement, signed July 21, 2016 due 2038; interest at 1.86%	34,690	36,471
\$22,491 Illinois Environmental Protection Agency Loan Agreement, signed December 13, 2016 due 2037; interest at 1.64%	19,018	20,050
\$28,761 Illinois Environmental Protection Agency Loan Agreement, signed August 18, 2016 due 2039; interest at 1.86%	25,627	26,898
\$5,460 Illinois Environmental Protection Agency Loan Agreement, signed May 11, 2017 due 2039; interest at 1.64%	4,993	5,230

(Continued)

	2021	2020
\$106,077 Illinois Environmental Protection Agency Loan Agreement, signed April 13, 2018 due 2039; interest at 1.76%	\$ 96,371	\$ 101,036
\$11,420 Illinois Environmental Protection Agency Loan Agreement, signed June 21, 2018 due 2039; interest at 1.76%	10,449	10,939
\$40,432 Illinois Environmental Protection Agency Loan Agreement, signed July 26, 2017 due 2041; interest at 1.64%	<u>37,139</u>	<u>-</u>
	2,341,421	2,408,774
Less current portion of long-term debt	(110,324)	(104,492)
Add unamortized bond discount/premium—net	<u>132,072</u>	<u>148,935</u>
Long-term portion—net	<u>\$ 2,363,169</u>	<u>\$ 2,453,217</u>

(Concluded)

Long-term debt during the years ended December 31, 2021 and 2020, changed as follows (in thousands):

	Balance January 1, 2021	Additions	Reductions	Balance December 31, 2021	Due within One Year
Revenue bonds and loans	\$ 2,408,774	\$ 37,139	\$ (104,492)	\$ 2,341,421	\$ 110,324
Unamortized bond discount/ premium—net	<u>148,935</u>	<u>-</u>	<u>(16,863)</u>	<u>132,072</u>	<u>-</u>
Total	<u>\$ 2,557,709</u>	<u>\$ 37,139</u>	<u>\$ (121,355)</u>	<u>\$ 2,473,493</u>	<u>\$ 110,324</u>
	Balance January 1, 2020	Additions	Reductions	Balance December 31, 2020	Due within One Year
Revenue bonds and loans	\$ 2,497,156	\$ 11,017	\$ (99,399)	\$ 2,408,774	\$ 104,492
Unamortized bond discount/ premium—net	<u>166,916</u>	<u>-</u>	<u>(17,981)</u>	<u>148,935</u>	<u>-</u>
Total	<u>\$ 2,664,072</u>	<u>\$ 11,017</u>	<u>\$ (117,380)</u>	<u>\$ 2,557,709</u>	<u>\$ 104,492</u>

Interest expense includes amortization of the deferred loss on bond refunding for 2021 and 2020 of \$2.0 million; net of amortization of bond premium of \$16.9 million and \$18.0 million, respectively.

As defined in the bond ordinances, net revenues are pledged for the payment of principal and interest on the bonds. Ordinances include covenants, which require that net revenues available for bonds, as adjusted, at least equal the greater of (i) 120% of the aggregate current annual debt service on the Senior Lien Revenue Bonds or (ii) the sum of the aggregate current annual debt service of the Senior Lien Revenue Bonds, plus 110% of the aggregate current annual Second Lien Revenue Bonds debt

service, plus the aggregate outstanding debt service requirements for the fiscal year on the outstanding IEPA loans, plus the annual debt service requirement for the fiscal year on aggregate outstanding water commercial paper notes, plus the annual debt service requirement on any outstanding water line of credit and that City management maintains all covenant reserve account balances at specified amounts. The above requirements were met in 2021 and 2020.

**Rate Increases**—Water rates are set by ordinance and established in an amount designed to pay the costs of Water Fund operations and capital improvements, including any related debt service. Effective June 30, 2020, the water rate was set at \$30.46 per 1,000 cubic feet and was increased to \$30.79 per 1,000 cubic feet effective June 1, 2021.

**Issuance of Debt**—On July 26, 2017, a loan agreement was signed with the Illinois Environmental Protection Agency for a project that consists of the replacement of the obsolete electrical switchgear and existing temporary standby generators at the Jardine Water Purification Plant. Amounts initially drawn from this agreement are classified as advances until repayment terms are established. Once repayment terms are established, the total advances are converted to long-term debt. During the year ended December 31, 2021, the total funds drawn from this loan agreement is \$37.0 million. The loan agreement has an interest rate of 1.64% with maturity dates from January 4, 2022 to January 4, 2041

A schedule of bond and note debt service requirements to maturity at December 31, 2021, is as follows (in thousands):

<b>Years Ending December 31</b>	<b>Principal</b>	<b>Interest</b>	<b>Total Debt Service</b>
2022	\$ 110,324	\$ 105,534	\$ 215,858
2023	114,303	100,876	215,179
2024	119,402	96,023	215,425
2025	128,752	91,081	219,833
2026	134,720	85,503	220,223
2027–2031	669,482	336,152	1,005,634
2032–2036	554,723	203,738	758,461
2037–2041	419,750	81,513	501,263
2042–2046	<u>89,965</u>	<u>7,844</u>	<u>97,809</u>
Total	<u>\$ 2,341,421</u>	<u>\$ 1,108,264</u>	<u>\$ 3,449,685</u>

**Debt Covenants**—The ordinances authorizing the issuance of outstanding Water Revenue Bonds require that net revenues available for bonds, as adjusted shall each fiscal year at least equal the greater of (i) 120% of the aggregate debt service requirement for the fiscal year on all the outstanding senior lien bonds, or (ii) the sum of (A) aggregate debt service requirements for the fiscal year on the outstanding senior lien bonds, plus (B) 110% of the aggregate debt service requirements for the fiscal year on of the outstanding second lien bonds, plus (C) aggregate outstanding debt service requirements for the fiscal year on the outstanding IEPA loans, plus (D) annual debt service requirement for the fiscal year on aggregate outstanding water commercial paper notes, plus (E) annual debt service requirement on any outstanding water line of credit. This requirement was met at December 31, 2021.



## 5. UTILITY PLANT

Utility plant changed during the years ended December 31, 2021 and 2020, as follows (in thousands):

	Balance— January 1, 2021	Additions	Disposals, Adjustments and Transfers	Balance— December 31, 2021
Utility plant not depreciated:				
Land and land rights	\$ 16,483	\$ -	\$ -	\$ 16,483
Construction in progress	<u>431,409</u>	<u>146,954</u>	<u>(127,202)</u>	<u>451,161</u>
Total utility plant not depreciated	<u>447,892</u>	<u>146,954</u>	<u>(127,202)</u>	<u>467,644</u>
Utility plant being depreciated:				
Structures and improvements	608,407	271	1,172	609,850
Distribution plant	4,513,217	31,042	101,034	4,645,293
Equipment	<u>867,213</u>	<u>1,407</u>	<u>(7,843)</u>	<u>860,777</u>
Total utility plant being depreciated	<u>5,988,837</u>	<u>32,720</u>	<u>94,363</u>	<u>6,115,920</u>
Less accumulated depreciation:				
Structures and improvements	(255,697)	(8,151)	-	(263,848)
Distribution plant	(660,084)	(52,641)	483	(712,242)
Equipment	<u>(456,375)</u>	<u>(24,811)</u>	<u>2,212</u>	<u>(478,974)</u>
Total accumulated depreciation	<u>(1,372,156)</u>	<u>(85,603)</u>	<u>2,695</u>	<u>(1,455,064)</u>
Utility plant being depreciated—net	<u>4,616,681</u>	<u>(52,883)</u>	<u>97,058</u>	<u>4,660,856</u>
Utility plant—net	<u>\$ 5,064,573</u>	<u>\$ 94,071</u>	<u>\$ (30,144)</u>	<u>\$ 5,128,500</u>

	Balance— January 1, 2020	Additions	Disposals, Adjustments and Transfers	Balance— December 31, 2020
Utility plant not depreciated:				
Land and land rights	\$ 6,858	\$ 9,625	\$ -	\$ 16,483
Construction in progress	<u>417,223</u>	<u>99,308</u>	<u>(85,122)</u>	<u>431,409</u>
Total utility plant not depreciated	<u>424,081</u>	<u>108,933</u>	<u>(85,122)</u>	<u>447,892</u>
Utility plant being depreciated:				
Structures and improvements	607,575	98	734	608,407
Distribution plant	4,404,131	105,594	3,492	4,513,217
Equipment	<u>808,135</u>	<u>7,606</u>	<u>51,472</u>	<u>867,213</u>
Total utility plant being depreciated	<u>5,819,841</u>	<u>113,298</u>	<u>55,698</u>	<u>5,988,837</u>
Less accumulated depreciation:				
Structures and improvements	(246,868)	(8,829)	-	(255,697)
Distribution plant	(609,794)	(50,918)	628	(660,084)
Equipment	<u>(434,234)</u>	<u>(22,506)</u>	<u>365</u>	<u>(456,375)</u>
Total accumulated depreciation	<u>(1,290,896)</u>	<u>(82,253)</u>	<u>993</u>	<u>(1,372,156)</u>
Utility plant being depreciated—net	<u>4,528,945</u>	<u>31,045</u>	<u>56,691</u>	<u>4,616,681</u>
Utility plant—net	<u>\$ 4,953,026</u>	<u>\$ 139,978</u>	<u>\$ (28,431)</u>	<u>\$ 5,064,573</u>

## 6. PENSION PLANS

**Plan Description**—Eligible Water employees participate in one of two single-employer defined benefit pension plans (the “Plans”). These Plans are: the Municipal Employees’ Annuity and Benefit Fund of Chicago (Municipal Employees’); and the Laborers’ and Retirement Board Employees’ Annuity and Benefit Fund of Chicago (Laborers’). The Plans are administered by individual retirement boards of trustees comprised of City officials or their designees and of trustees elected by plan members. Certain employees of the Chicago Board of Education participate in the Municipal Employees’ Fund or the Laborers’ and Retirement Board Employees’ Annuity and Benefit Fund. Each Plan issues a publicly available financial report that includes financial statements and required supplementary information that can be obtained at [www.meabf.org](http://www.meabf.org) and [www.labfchicago.org](http://www.labfchicago.org).

**Benefits Provided**—The Plans provide retirement, disability, and death benefits as established by State law. Benefits generally vest after 10 years of credited service. Employees qualify for an unreduced retirement age minimum formula annuity based on a combination of years of service and age of retirement. Employees may also receive a reduced retirement age minimum formula annuity if they do not meet the age and service requirements for the unreduced retirement age annuity. The requirements of age and service are different for employees depending on when they first became members of their respective Plans. For the Plans, employees who became members before January 1, 2011 are considered Tier 1 Employees. Those employees who became members on or after January 1, 2011 but before July 6, 2017 are considered Tier 2 Employees. For those employees who became members on or after July 6, 2017 are considered Tier 3 Employees. Public Act 100-0023 (P.A. 100-0023),

which established the requirements for Tier 3 employees, includes a provision for Tier 2 employees to elect to be considered as Tier 3 employees. The annuity is computed by multiplying the final average salary by a percentage ranging from 2.2% to 2.5% per year of credited service. The final average salary is the employee’s highest average annual salary for any four consecutive years within the last 10 years of credited service for participants who are Tier 1 Employees and any eight consecutive years within the last 10 years of credited service for participants who are Tier 2 Employees or Tier 3 Employees.

Benefit terms provide for annual adjustments to each employee’s retirement allowance subsequent to the employees’ retirement date. For Tier 1 Employees, the annual adjustments for Municipal Employees’ and Laborers’ are 3.0%, compounded, for annuitants born before January 1, 1966 and 1.5%, simple, born after January 1, 1966 or later. For Tier 2 Employees and Tier 3 Employees, the annual adjustments are equal to the lesser of 3.0% and 50% of CPI-U of the original benefit.

**Employees Covered by Benefit Terms**—At December 31, 2021, the following City employees were covered by the benefit terms:

	<b>Municipal Employees’</b>	<b>Laborers’</b>	<b>Total</b>
Inactive employees or beneficiaries currently receiving benefits	25,683	3,568	29,251
Inactive employees entitled to but not yet receiving benefits	21,304	1,473	22,777
Active employees	<u>32,925</u>	<u>2,602</u>	<u>35,527</u>
	<u>79,912</u>	<u>7,643</u>	<u>87,555</u>

**Contributions**—For the Municipal Employees’ and Laborers’ Plans, Public Act 100-0023 (P.A. 100-0023) was enacted on July 06, 2017. P.A. 100-0023 requires the City to contribute specific amounts to the Municipal Employees’ and the Laborers’ Plans in the aggregate amounts as follows: in payment year 2019, \$392.0 million; in payment year 2020, \$481.0 million; in payment year 2021, \$571.0 million; in payment year 2022, \$660.0 million. Additionally, P.A. 100-0023 requires that the City’s contributions are at actuarially determined rates beginning in payment year 2023 and future funding be sufficient to produce a funding level of 90% by the year end of 2058.

The City’s contributions are budgeted in the same year as the applicable levy year for the property taxes funding the contributions. The City’s contributions are then paid to the pension funds in the following year (which is when the levy property taxes are collected and paid to the City by the Cook County Treasurer). The Water Fund’s proportion of the contribution was determined based on the rates of Water Fund’s salaries within each corresponding pension plan to the total budgeted salaries for 2021 and 2020.

The contribution to the two pension plans from the Water Fund was \$50.3 million and \$44.4 million for the years ended December 31, 2021 and 2020, respectively.

**Net Pension Liability, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**—At December 31, 2021 and 2020, the Water Fund recorded a liability of \$1,154 million and \$1,159 million, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2021 and 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of those dates.

**Changes in Actuarial Assumptions**—Changes in the municipal bond rate resulted in a decrease in the single discount rate for Laborers. See discount rate section below.

The change in the single discount rate and other assumptions increased the net pension liability by \$3.5 million for Laborers'. These changes are being amortized into expense over a 4-year period for Laborers'.

The Water Fund's proportion of the net pension liability was determined based on the rates of Water Fund's salaries within each corresponding pension plan to the total budgeted salaries for 2021 and 2020. At December 31, 2021 and 2020, the Water Fund's proportion was 6.4% and 6.6% of the Municipal Employees' plan, respectively, and 15.9% and 15.8%, respectively, of the Laborer's plan.

For the years ended December 31, 2021, and 2020, the Water Fund recognized pension benefit of (\$33.9) million and (\$47.9) million, respectively.

At December 31, 2021 and 2020, the Water Fund reported total deferred outflows of resources of \$19.0 million and \$17.0 million, respectively, and deferred inflows of resources of \$39.1 million and \$125.8 million, respectively, related to pensions from the following sources:

Municipal Employees' (dollars in thousands):

	2021		2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 11,409	\$ -	\$ 8,533	\$ 2,352
Changes of assumptions	-	-	-	98,330
Net difference between projected and actual earnings on pension plan investments	-	16,675	-	6,723
Total	<u>\$ 11,409</u>	<u>\$ 16,675</u>	<u>\$ 8,533</u>	<u>\$ 107,405</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to Municipal Employees' pensions will be recognized in pension expense/(benefit) as follows:

Years Ended December 31	
2022	\$ 3,132
2023	(4,462)
2024	(833)
2025	(3,103)
2026	-
Total	<u>\$ (5,266)</u>

Laborers' (dollars in thousands):

	2021		2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 108	\$ 5,638	\$ 678	\$ 2,958
Changes of assumptions	7,522	84	7,855	528
Net difference between projected and actual earnings on pension plan investments	-	16,744	-	14,888
Total	<u>\$ 7,630</u>	<u>\$ 22,466</u>	<u>\$ 8,533</u>	<u>\$ 18,374</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to Laborers' pensions will be recognized in pension expense/(benefit) as follows:

**Years Ended  
December 31**

2022	\$ (1,180)
2023	(7,185)
2024	(4,705)
2025	(1,766)
2026	-
Total	<u>\$ (14,836)</u>

***Deferred Outflow and Deferred Inflows Related to Changes in Proportionate Share of Contributions—***

For the years ended December 31, 2021 and 2020, the Water Fund reported a pension benefit of \$19.4 million and \$0, respectively, related to changes in its proportionate share of contributions. As of December 31, 2021 and 2020, the Water Fund reported deferred inflows of \$77.1 million and \$79.8 million, respectively, and deferred outflows of \$6.6 million and \$18.8 million, respectively, related to changes in its proportionate share of contributions. These deferred amounts will be recognized as a pension (benefit)/charge over a period of four years.

***Actuarial Assumptions—***The total pension liability in the December 31, 2021 and 2020 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	Employees'	Laborers'
Inflation	2.50 %	2.25 %
Salary increases	3.50–7.75 (a)	3.00 (b)
Investment rate of return	7.00 (c)	7.25 (c)

(a) (1.50%–6.50% for 2020–2022), varying by years of service

(b) Plus a service—based increase in the first 9 years

(c) Net of investment expense

Pension Plan	Mortality Table Name	Mortality Improvement
Municipal Employees'	Post Retirement RP-2014 Healthy Annuitant Mortality Table	Generational—Scale MP-2016
	Pre-Retirement RP-2014 Employee Mortality Table	Generational—Scale MP-2016
Laborers'	Post Retirement Pub-2010 Amount-weighted Below-median Income General Healthy Retiree Mortality Tables, Sex Distinct	Generational—Scale MP-2020 2-dimensional
	Pre-Retirement Pub-2010 Amount-weighted Below-median Income General Employee Mortality Tables, Sex Distinct	Generational—Scale MP-2020 2-dimensional

The actuarial assumptions used in the December 31, 2021 valuation were adjusted based on the results of actuarial experience study for the periods:

***Municipal Employees'***—January 1, 2012–December 31, 2016

***Laborers'***—January 1, 2017–December 31, 2019

The long term expected rate of return on pension plan investments was determined using the building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class as of December 31, 2021 and 2020, are summarized in the following tables:

2021	Target Allocation		Long-Term Expected Real Rate of Return	
	Municipal Employees	Laborers'	Municipal Employees	Laborers'
Asset class:				
Domestic equity	26.0 %	- %	7.4 %	- %
U.S. equity	-	25.0	-	5.3
Non U.S. equity	-	20.0	-	5.3
Global equity	5.0	-	6.8	-
Global low volatility equity	-	5.0	-	4.3
International equity	17.0	-	7.4	-
Fixed income	25.0	20.0	2.0	(0.8)
Hedge funds	10.0	10.0	5.6	2.8
Infrastructure	2.0	-	7.0	-
Private debt	-	3.0	-	7.1
Private equity	5.0	4.0	11.4	8.8
Real estate	10.0	10.0	5.8	4.2
Private real assets	-	3.0	-	4.7
Total	<u>100.0 %</u>	<u>100.0 %</u>		

2020	Target Allocation		Long-Term Expected Real Rate of Return	
	Municipal Employees	Laborers'	Municipal Employees	Laborers'
Asset class:				
Domestic equity	26.0 %	- %	7.3 %	- %
U.S. equity	-	25.0	-	5.3
Non U.S. equity	-	20.0	-	5.3
Global equity	5.0	-	7.5	-
Global low volatility equity	-	5.0	-	4.2
International equity	17.0	-	7.5	-
Fixed income	25.0	20.0	2.3	(1.2)
Hedge funds	10.0	10.0	5.5	2.8
Infrastructure	2.0	-	7.3	-
Private debt	-	3.0	-	7.4
Private equity	5.0	4.0	10.8	9.1
Real estate	10.0	10.0	6.0	3.4
Private real assets	-	3.0	-	4.9
Total	<u>100.0 %</u>	<u>100.0 %</u>		

#### Discount Rate

**Municipal Employees'**—The Single Discount Rate used to measure the total pension liability as of December 31, 2021 and 2020 was 7.0% and 7.0% respectively. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made according to the contribution rate applicable for each member's tier and that employer contributions will be made as specified by Public Act 100-0023. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions and contributions from future plan members that are intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Laborers'**—A Single Discount Rate of 6.77% and 6.84% was used to measure the total pension liability as of December 31, 2021 and 2020, respectively. This Single Discount Rate was based on an expected rate of return on pension plan investments of 7.25% and 7.25% as of December 31, 2021 and 2020, and a municipal bond rate of 1.84% and 2% as of December 31, 2021 and 2020, respectively (based on the daily rate closest to but not later than the measurement date of the "20-Year Municipal GO AA Index" rate from Fidelity Index). The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at under the statutory funding policy. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2074 (for the 2021 valuation) and the year 2073 (for the 2020 valuation). As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2074 (for the 2021 valuation) and the year 2023 (for the 2020 valuation), and the municipal bond rate was applied to all benefit payments after that date.

Sensitivity of the Water Fund’s Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

**Municipal Employees’**—The following presents the Water Fund’s allocated share of the net pension liability as of December 31, 2021 and 2020, calculated using the discount rate of 7.0%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate (dollars in thousands):

2021	Current		
	1% Decrease	Discount Rate	1% Increase
Net pension liability December 31, 2021:			
Municipal Employees’ discount rate	6.00 %	7.00 %	8.00 %
Municipal Employees’ net pension liability	1,049,998	904,174	782,940

2020	Current		
	1% Decrease	Discount Rate	1% Increase
Net pension liability December 31, 2020:			
Municipal Employees’ discount rate	6.00 %	7.00 %	8.00 %
Municipal Employees’ net pension liability	1,054,589	908,022	786,214

**Laborers’**—The following presents the Water Fund’s allocated share of the net pension liability as of December 31, 2021 and 2020, calculated using the discount rate of 6.77% and 6.84%, respectively, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate (dollars in thousands):

2021	Current		
	1% Decrease	Discount Rate	1% Increase
Net pension liability December 31, 2021:			
Laborers’ discount rate	5.77 %	6.77 %	7.77 %
Laborers’ net pension liability	\$ 304,118	\$ 249,501	\$ 203,656

2020	Current		
	1% Decrease	Discount Rate	1% Increase
Net pension liability December 31, 2020:			
Laborers’ discount rate	5.84 %	6.84 %	7.84 %
Laborers’ net pension liability	\$ 304,354	\$ 250,711	\$ 205,704

**Pension Plan Fiduciary Net Position**—Detailed information about the pension plans’ fiduciary net position is available in the separately issued Pension Plans’ financial reports.

**7. RELATED-PARTY TRANSACTIONS**

Included in operating expenses are reimbursements to the General Fund of the City for services provided by other City departments, employee fringe benefits, and certain payments made on behalf of the Water Fund. Such reimbursements amounted to \$139.0 million and \$133.7 million in 2021 and 2020, respectively.



## 8. COMMITMENTS AND CONTINGENCIES

The Water Fund has certain contingent liabilities resulting from litigation, claims, or commitments incident to the ordinary course of business. Management expects that final resolution of these contingencies will not have a material adverse effect on the financial position or results of operations of the Water Fund.

The Water Fund provides workers' compensation benefits and employee health benefits under self-insurance programs administered by the City and by a third-party administrator for workers' compensation. Such claims outstanding, including claims incurred but not reported, are estimated and recorded as liabilities in the basic financial statements.

Uninsured claim expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. Changes in the claims liability amounts for the years ended December 31, 2021 and 2020, are as follows (in thousands):

	<b>2021</b>	<b>2020</b>
Balance—January 1	\$ 62,731	\$ 51,132
Claims incurred on current and prior-year events	36,283	42,853
Claims paid on current and prior-year events	<u>(31,854)</u>	<u>(31,254)</u>
Balance—December 31	<u>\$ 67,160</u>	<u>\$ 62,731</u>

The City purchases annuity contracts from commercial insurers to satisfy certain liabilities, accordingly, no liability is reported for those claims. Property and casualty risks for the Water Fund are transferred to commercial insurers. Claims have not exceeded the purchased insurance coverage in the past three years.

At December 31, 2021 and 2020, the Water Fund entered into contracts with outstanding commitments of approximately \$178.5 million and \$194.4 million, respectively, for construction projects.

## 9. DEFERRED OUTFLOWS/INFLOWS OR RESOURCES

	<b>2021</b>	<b>2020</b>
	<b>(Dollars in Thousands)</b>	
Deferred outflows of resources:		
Deferred outflows from pension activities	\$ 19,040	\$ 17,066
Changes in proportionate share of pension contribution	6,612	18,845
Unamortized deferred bond refunding costs	<u>18,663</u>	<u>20,660</u>
Total deferred outflows of resources	<u>\$ 44,315</u>	<u>\$ 56,571</u>
Deferred inflows of resources:		
Deferred inflows from pension activities	\$ (39,140)	\$ (125,780)
Changes in proportionate share of pension contribution	<u>(77,119)</u>	<u>(79,840)</u>
Total deferred inflows of resources	<u>\$ (116,259)</u>	<u>\$ (205,620)</u>

Refer to Note 6 Pension Plans—Deferred Outflows Related to Pension Activities and to Changes in Proportionate Share of Contribution sections.

**10. SUBSEQUENT EVENTS**

The Water Fund has evaluated subsequent events through June 29, 2022, the date the basic financial statements were available to be issued and concluded no subsequent events have occurred that would require recognition that have not already been recognized or that require disclosure that have not already been disclosed.

\* \* \* \* \*

**REQUIRED SUPPLEMENTAL INFORMATION**

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**REQUIRED SUPPLEMENTARY INFORMATION  
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS  
LAST SEVEN FISCAL YEARS  
(Dollars in thousands)**

<b>Municipal Employees'</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
<b>TOTAL PENSION LIABILITY:</b>							
Service cost*	\$ 246,066	\$ 236,302	\$ 228,465	\$ 223,528	\$ 572,534	\$ 619,743	\$ 226,816
Interest	1,228,905	1,190,694	1,159,253	1,123,348	915,711	878,369	909,067
Benefit changes	-	-	-	-	-	-	2,140,009
Differences between expected and actual experience	121,988	100,938	16,676	95,540	(177,755)	(127,119)	(109,835)
Assumption changes	-	-	-	-	(7,431,191)	(578,920)	8,711,755
Benefit payments including refunds	<u>(1,010,191)</u>	<u>(973,478)</u>	<u>(952,652)</u>	<u>(916,198)</u>	<u>(888,174)</u>	<u>(859,672)</u>	<u>(826,036)</u>
Net change in total pension liability	586,768	554,456	451,742	526,218	(7,008,875)	(67,599)	11,051,776
Total pension liability—beginning	<u>17,814,812</u>	<u>17,260,356</u>	<u>16,808,614</u>	<u>16,282,396</u>	<u>23,291,271</u>	<u>23,358,870</u>	<u>12,307,094</u>
Total pension liability—ending (a)	<u>18,401,580</u>	<u>17,814,812</u>	<u>17,260,356</u>	<u>16,808,614</u>	<u>16,282,396</u>	<u>23,291,271</u>	<u>23,358,870</u>
<b>PLAN FIDUCIARY NET POSITION:</b>							
Contributions—employer	573,198	496,992	418,269	349,574	261,764	149,718	149,225
Contributions—employee	163,411	157,798	146,645	138,400	134,765	130,391	131,428
Net investment income	498,299	335,403	560,940	(204,975)	610,515	281,419	114,025
Benefit payments including refunds of employee contribution	(1,010,191)	(973,478)	(952,652)	(916,198)	(888,174)	(859,672)	(826,036)
Administrative expenses	(6,687)	(7,118)	(6,740)	(6,639)	(6,473)	(7,056)	(6,701)
Other	-	-	-	-	5,394	-	-
Net change in plan fiduciary net position	218,030	9,597	166,462	(639,838)	117,791	(305,200)	(438,059)
Plan fiduciary net position—beginning	<u>4,090,239</u>	<u>4,080,642</u>	<u>3,914,180</u>	<u>4,554,018</u>	<u>4,436,227</u>	<u>4,741,427</u>	<u>5,179,486</u>
Plan fiduciary net position—ending (b)	<u>4,308,269</u>	<u>4,090,239</u>	<u>4,080,642</u>	<u>3,914,180</u>	<u>4,554,018</u>	<u>4,436,227</u>	<u>4,741,427</u>
NET PENSION LIABILITY—Ending (a) - (b)	<u>\$14,093,311</u>	<u>\$13,724,573</u>	<u>\$13,179,714</u>	<u>\$12,894,434</u>	<u>\$11,728,378</u>	<u>\$18,855,044</u>	<u>\$18,617,443</u>
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	<u>23.41 %</u>	<u>22.96 %</u>	<u>23.64 %</u>	<u>23.29 %</u>	<u>27.97 %</u>	<u>19.05 %</u>	<u>20.30 %</u>
ALLOCATED COVERED PAYROLL	<u>\$ 123,388</u>	<u>\$ 123,184</u>	<u>\$ 129,976</u>	<u>\$ 123,292</u>	<u>\$ 119,698</u>	<u>\$ 109,644</u>	<u>\$ 111,282</u>
EMPLOYER'S NET PENSION LIABILITY AS A PERCENTAGE OF ALLOCATED COVERED-PAYROLL	<u>704.25 %</u>	<u>737.13 %</u>	<u>731.07 %</u>	<u>743.37 %</u>	<u>695.42 %</u>	<u>1,144.85 %</u>	<u>1,132.81 %</u>
ALLOCATED NET PENSION LIABILITY	<u>\$ 904,174</u>	<u>\$ 908,022</u>	<u>\$ 950,223</u>	<u>\$ 916,516</u>	<u>\$ 832,399</u>	<u>\$ 1,255,259</u>	<u>\$ 1,255,259</u>
ALLOCATED PERCENTAGE	<u>6.42 %</u>	<u>6.62 %</u>	<u>7.21 %</u>	<u>7.11 %</u>	<u>7.10 %</u>	<u>6.66 %</u>	<u>6.66 %</u>

\* Includes pension plan administrative expense

\*\* Allocated covered payroll is the amount in force as of the actuarial valuation date and likely differs from actual payroll during fiscal year

Ten year information will be provided prospectively starting with year 2015

(Continued)

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**REQUIRED SUPPLEMENTARY INFORMATION  
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS  
LAST SEVEN FISCAL YEARS  
(Dollars in thousands)**

Laborers'	2021	2020	2019	2018	2017	2016	2015
<b>TOTAL PENSION LIABILITY:</b>							
Service cost *	\$ 40,411	\$ 39,216	\$ 38,522	\$ 40,801	\$ 80,232	\$ 82,960	\$ 38,389
Interest	192,343	191,099	188,347	183,135	154,047	150,166	153,812
Benefit changes	-	-	-	-	150	-	384,033
Differences between expected and actual experience	(31,083)	(18,992)	(8,820)	15,143	(62,178)	(30,428)	(46,085)
Assumption changes	21,870	44,034	32,846	(11,788)	(1,074,754)	(62,905)	1,175,935
Benefit payments including refunds	(172,514)	(169,056)	(164,959)	(160,061)	(157,050)	(154,683)	(152,530)
Pension plan administrative expense	(3,837)	(3,616)	(3,691)	(3,933)	(3,985)	(4,080)	(3,844)
Net change in total pension liability	47,190	82,685	82,245	63,297	(1,063,538)	(18,970)	1,549,710
Total pension liability—beginning	<u>2,858,334</u>	<u>2,775,649</u>	<u>2,693,404</u>	<u>2,630,107</u>	<u>3,693,645</u>	<u>3,712,615</u>	<u>2,162,905</u>
Total pension liability—ending (a)	<u>2,905,524</u>	<u>2,858,334</u>	<u>2,775,649</u>	<u>2,693,404</u>	<u>2,630,107</u>	<u>3,693,645</u>	<u>3,712,615</u>
<b>PLAN FIDUCIARY NET POSITION:</b>							
Contributions—employer	84,969	73,744	59,346	47,844	35,457	12,603	12,412
Contributions—employee	17,637	18,064	18,143	17,837	17,411	17,246	16,844
Net investment income	138,105	163,057	184,027	(75,219)	207,981	57,997	(22,318)
Benefit payments including refunds of employee contribution	(172,514)	(169,056)	(164,959)	(160,061)	(157,050)	(154,683)	(152,530)
Administrative expenses	(3,837)	(3,616)	(3,691)	(3,933)	(3,985)	(4,080)	(3,844)
Other	-	-	-	661	-	-	-
Net change in plan fiduciary net position	64,360	82,193	92,866	(172,871)	99,814	(70,917)	(149,436)
Plan fiduciary net position—beginning	<u>1,269,742</u>	<u>1,187,549</u>	<u>1,094,683</u>	<u>1,267,554</u>	<u>1,167,740</u>	<u>1,238,657</u>	<u>1,388,093</u>
Plan fiduciary net position—ending (b)	<u>1,334,102</u>	<u>1,269,742</u>	<u>1,187,549</u>	<u>1,094,683</u>	<u>1,267,554</u>	<u>1,167,740</u>	<u>1,238,657</u>
NET PENSION LIABILITY—Ending (a) - (b)	<u>\$1,571,422</u>	<u>\$1,588,592</u>	<u>\$1,588,100</u>	<u>\$1,598,721</u>	<u>\$ 1,362,553</u>	<u>\$2,525,905</u>	<u>\$2,473,958</u>
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	<u>45.92 %</u>	<u>44.42 %</u>	<u>42.78 %</u>	<u>40.64 %</u>	<u>48.19 %</u>	<u>31.61 %</u>	<u>33.36 %</u>
ALLOCATED COVERED PAYROLL **	<u>\$ 33,679</u>	<u>\$ 32,699</u>	<u>\$ 34,288</u>	<u>\$ 33,855</u>	<u>\$ 32,031</u>	<u>\$ 30,606</u>	<u>\$ 31,935</u>
EMPLOYER'S NET PENSION LIABILITY AS A PERCENTAGE OF ALLOCATED COVERED PAYROLL	<u>740.81 %</u>	<u>766.72 %</u>	<u>750.48 %</u>	<u>755.95 %</u>	<u>653.68 %</u>	<u>1,213.48 %</u>	<u>1,208.16 %</u>
ALLOCATED NET PENSION LIABILITY	<u>\$ 249,501</u>	<u>\$ 250,711</u>	<u>\$ 257,325</u>	<u>\$ 255,928</u>	<u>\$ 209,380</u>	<u>\$ 371,399</u>	<u>\$ 385,827</u>
ALLOCATED PERCENTAGE	<u>15.88 %</u>	<u>15.78 %</u>	<u>16.20 %</u>	<u>16.01 %</u>	<u>15.37 %</u>	<u>14.70 %</u>	<u>15.60 %</u>

\* Includes pension plan administrative expense.

\*\* Allocated covered payroll is the amount in force as of the actuarial valuation date and likely differs from actual payroll during fiscal year

Ten year information will be provided prospectively starting with year 2015

(Concluded)

# CITY OF CHICAGO, ILLINOIS WATER FUND

## SCHEDULE OF CONTRIBUTIONS LAST TEN YEARS (Dollars are in thousands)

### Municipal Employees':

Years Ended December 31	Contributions in Relation to the			Covered Payroll*	Contributions as a Percentage of Covered Payroll
	Actuarially Determined Contributions	Actuarially Determined Contribution	Contribution Deficiency		
2012	\$ 690,823	\$148,859	\$541,964	\$1,590,794	9.36 %
2013	820,023	148,197	671,826	1,580,289	9.38
2014	839,039	149,747	689,292	1,602,978	9.34
2015	677,200	149,225	527,975	1,643,481	9.08
2016	961,770	149,718	812,052	1,646,939	9.09
2017	1,005,457	261,764	743,693	1,686,533	15.52
2018	1,049,916	349,574	700,342	1,734,596	20.15
2019	1,117,388	418,269	699,119	1,802,790	23.20
2020	1,167,154	496,992	670,162	1,861,905	26.69
2021	1,218,361	573,198	645,163	2,001,181	28.64

\* Covered payroll is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during fiscal year.

The schedule of contribution amounts are presented City-wide, as the statutory requirement for contribution is for the City of Chicago and not the individual Enterprise Fund.

### Laborers':

Years Ended December 31	Contributions in Relation to the			Covered Payroll**	Contributions as a Percentage of Covered Payroll
	Actuarially Determined Contributions*	Actuarially Determined Contribution	Contribution Deficiency		
2012	\$ 77,566	\$ 11,853	\$ 65,713	\$ 198,790	5.96 %
2013	106,199	11,583	94,616	200,352	5.78
2014	106,019	12,161	93,858	202,673	6.00
2015	79,851	12,412	67,439	204,773	6.06
2016	117,033	12,603	104,430	208,155	6.05
2017	124,226	35,457	88,769	208,442	17.01
2018	129,247	47,844	81,403	211,482	22.62
2019	148,410	59,346	89,064	211,608	28.05
2020	155,794	73,744	82,050	207,195	35.59
2021	155,245	84,969	70,276	212,122	40.06

\* The LABF Statutory Funding does not conform to Actuarial Standards of Practice, therefore, the actuarially determined contribution is equal to the normal cost plus an amount to amortize the unfunded liability using dollar payments and a 30 year open amortization period.

\*\* Covered payroll is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during fiscal year.

The schedule of contribution amounts are presented City-wide, as the statutory requirement for contribution is for the City of Chicago and not the individual Enterprise Fund.

(Continued)

# CITY OF CHICAGO, ILLINOIS

## WATER FUND

### SCHEDULE OF CONTRIBUTIONS LAST TEN YEARS (Dollars are in thousands)

Actuarial Methods and Assumptions	Municipal Employees'	Laborers'
Actuarial valuation date	December 31, 2021 (a)	December 31, 2021 (b)
Actuarial cost method	Entry age normal	Entry age normal
Asset valuation method	5-yr Smoothed Market	5-yr Smoothed Market
Actuarial assumptions:		
Inflation	2.50 %	2.25 %
Salary increases	3.50 %–7.75 % (c)	3.00 (d)
Investment rate of return	7.00 (e)	7.25 (f)
Retirement age	(g)	(h)
Mortality	(i)	(j)
Other information	(k)	(l)

- (a) Actuarially determined contribution amount is determined as of December 31, with appropriate interest to the middle of the year.
- (b) Actuarially determined contribution rates are calculated as of December 31, which is 12 months prior to the end of the fiscal year in which contributions are reported.
- (c) (1.50%–6.50% for 2020–2022), varying by years of service.
- (d) Plus service based increases in the first 9 years.
- (e) Net of investment expense.
- (f) Net of investment expense, including inflation.
- (g) For employees first hired prior to January 1, 2011, rates of retirement are based on the recent experience of the Fund (effective December 31, 2017). For employees first hired on or after January 1, 2011 and before July 6, 2017, rates of retirement for each age from 62 to 80 were used (effective December 31, 2011). For employees first hired on or after July 6, 2017, rates of retirement for each age from 62 to 80 were December 31, 2017, valuation pursuant to an experience used (effective December 31, 2017).
- (h) Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the December 31, 2020 valuation pursuant to an experience study of the period January 1, 2017 thru December 31, 2019.
- (i) Post-retirement mortality rates were based on the RP-2014 Healthy Annuitant Mortality Tables, set forward two years for males and one year for females, and projected generationally using scale MP-2016. Pre-retirement mortality rates were based on 120% of the RP-2014 Employee Mortality Tables projected generationally using scale MP-2016.
- (j) Post Retirement Mortality: Scaling factors of 109% for males, and 108% for females of the Pub-2010 Amount-weighted Below-median Income General Healthy Retiree Mortality Tables, sex distinct with the generational mortality improvement using MP-2020 2-dimensional mortality improvement scales recently released by the SOA. This assumptions provides a margin for mortality improvements.
- (k) Other assumptions: Same as those used in the December 31, 2021, actuarial funding valuations.
- (l) The actuarial valuation is based on the statutes in effect as of December 31, 2020.

(Concluded)

**ADDITIONAL SUPPLEMENTAL INFORMATION**



**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**ADDITIONAL SUPPLEMENTARY INFORMATION  
SCHEDULE OF UTILITY PLANT  
FOR THE YEAR ENDED DECEMBER 31, 2021  
(In thousands)**

	Assets				Balance— December 31, 2021	Accumulated Depreciation				Net Balance— December 31, 2021
	Balance— January 1, 2021	Additions	Adjustments/ Disposals	Transfers		Balance— January 1, 2021	Provision	Adjustments/ Disposals	Balance— December 31, 2021	
<b>LAND AND LAND RIGHTS:</b>										
Power and pumping	\$ 13,767	\$ (9,625)	\$ -	\$ -	\$ 4,142	\$ -	\$ -	\$ -	\$ -	\$ 4,142
Distribution reservoir	300	-	-	-	300	-	-	-	-	300
Purification	1,739	-	-	-	1,739	-	-	-	-	1,739
General and maintenance	677	9,625	-	-	10,302	-	-	-	-	10,302
Total land and land rights	16,483	-	-	-	16,483	-	-	-	-	16,483
<b>STRUCTURES AND IMPROVEMENTS:</b>										
Cribs	22,968	-	-	-	22,968	6,682	271	-	6,953	16,015
Lake and land tunnels	119,621	-	-	-	119,621	47,026	1,184	-	48,210	71,411
Intake structures	9,531	-	-	-	9,531	5,230	95	-	5,325	4,206
Power and pumping structures	145,428	2	-	628	146,058	46,701	1,543	-	48,244	97,814
Purification buildings	253,747	162	-	559	254,468	129,912	4,088	-	134,000	120,468
Distribution reservoirs	16,979	-	-	-	16,979	7,038	226	-	7,264	9,715
Offices, maintenance, and general	40,118	-	-	-	40,118	13,108	744	-	13,852	26,266
Contract retainage	15	107	(15)	-	107	-	-	-	-	107
Total structures and improvements	608,407	271	(15)	1,187	609,850	255,697	8,151	-	263,848	346,002
<b>DISTRIBUTION PLANT:</b>										
Mains and accessories	4,229,298	12,601	(486)	108,881	4,350,294	571,319	42,767	(483)	613,603	3,736,691
Meters and installations	260,087	4,234	-	-	264,321	77,064	9,620	-	86,684	177,637
Hydrants and valves	16,471	-	-	-	16,471	11,701	254	-	11,955	4,516
Contract retainage	7,361	14,207	(7,361)	-	14,207	-	-	-	-	14,207
Total distribution plant	4,513,217	31,042	(7,847)	108,881	4,645,293	660,084	52,641	(483)	712,242	3,933,051
<b>EQUIPMENT:</b>										
Power production	65,420	-	-	-	65,420	54,753	1,350	-	56,103	9,317
Pumping	302,295	190	(2,256)	807	301,036	145,357	8,251	-	153,608	147,428
Purification	440,620	386	-	-	441,006	209,363	12,782	-	222,145	218,861
Heavy machinery	23,790	-	(1,916)	-	21,874	20,286	1,694	(1,460)	20,520	1,354
Transportation	13,531	77	(795)	-	12,813	9,381	719	(752)	9,348	3,465
Miscellaneous	17,874	-	-	-	17,874	17,235	15	-	17,250	624
Contract retainage	3,683	754	(3,683)	-	754	-	-	-	-	754
Total equipment	867,213	1,407	(8,650)	807	860,777	456,375	24,811	(2,212)	478,974	381,803
Total structures and improvements, distribution plant, and equipment	5,988,837	32,720	(16,512)	110,875	6,115,920	1,372,156	85,603	(2,695)	1,455,064	4,660,856
<b>CONSTRUCTION IN PROGRESS:</b>										
Filtration plants	80,792	23,642	-	(559)	103,875	-	-	-	-	103,875
Pumping stations	56,750	27,299	-	(1,435)	82,614	-	-	-	-	82,614
Water mains	277,540	93,269	-	(108,881)	261,928	-	-	-	-	261,928
Contract retainage	16,327	2,744	(16,327)	-	2,744	-	-	-	-	2,744
Total construction in progress	431,409	146,954	(16,327)	(110,875)	451,161	-	-	-	-	451,161
<b>TOTAL UTILITY PLANT</b>	<b>\$6,436,729</b>	<b>\$179,674</b>	<b>\$(32,839)</b>	<b>\$ -</b>	<b>\$6,583,564</b>	<b>\$1,372,156</b>	<b>\$85,603</b>	<b>\$(2,695)</b>	<b>\$1,455,064</b>	<b>\$5,128,500</b>

## **STATISTICAL DATA**

## STATISTICAL DATA

The statistical data section includes selected financial and operating information, generally presented on a multiyear basis. Statistical section information is presented in five categories—financial trends, revenue capacity, debt capacity, operating, and demographic and economic information. Schedules in the statistical section are the following:

***Financial Trends Information***—These schedules contain trend information to help the reader understand how the Water Fund’s basic financial performance and well-being have changed over time.

***Revenue Capacity Information***—These schedules contain information to help the reader assess the Water Fund’s most significant local revenue source and water sales charge.

***Debt Capacity Information***—These schedules present information to help the reader assess the affordability of the Water Fund’s current levels of outstanding debt and the Water Fund’s ability to issue additional debt in the future.

***Operating Information***—These schedules contain service and infrastructure data to help the reader understand how the information in the Water Fund’s financial report relates to the services the Department of Water Management and the Water Fund and how it provides the activities it performs.

***Demographic and Economic Information***—These schedules offer demographic and economic indicators to help the reader understand where the environment within which the City’s financial activities take place.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
CHANGES IN NET POSITION  
TEN YEARS ENDED DECEMBER 31, 2012–2021  
(In millions)**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>OPERATING REVENUES:</b>										
Water sales	\$ 562.6	\$ 620.5	\$ 693.1	\$ 773.8	\$ 760.6	\$ 749.8	\$ 754.8	\$ 737.9	\$ 743.8	\$ 763.8
Provision for doubtful accounts	-	-	(22.5)	(23.6)	(24.8)	(20.2)	(8.2)	(20.4)	(29.5)	(15.2)
Other operating revenues	<u>13.7</u>	<u>16.6</u>	<u>22.1</u>	<u>19.2</u>	<u>25.6</u>	<u>29.4</u>	<u>27.4</u>	<u>26.9</u>	<u>22.2</u>	<u>27.1</u>
Total operating revenues	<u>576.3</u>	<u>637.1</u>	<u>692.7</u>	<u>769.4</u>	<u>761.4</u>	<u>759.0</u>	<u>774.0</u>	<u>744.4</u>	<u>736.5</u>	<u>775.7</u>
<b>OPERATING EXPENSES:</b>										
Source of supply	0.2	0.1	0.3	0.2	0.1	0.1	0.2	0.4	0.2	0.1
Power and pumping	41.7	43.2	43.1	41.3	39.6	41.4	41.1	42.5	40.7	45.2
Purification	56.1	60.9	58.5	57.1	57.5	60.5	62.9	67.8	61.8	62.3
Transmission and distribution	36.5	29.5	43.7	37.3	39.2	39.6	59.7	71.8	71.7	74.8
Provision for doubtful accounts	15.7	25.4	-	-	-	-	-	-	-	-
Customer accounting and collection	10.0	11.6	11.9	14.7	15.3	18.2	22.1	27.2	27.0	26.5
Administrative and general	21.9	21.2	22.0	22.1	20.3	13.6	13.0	13.0	13.9	14.9
Central services and General Fund reimbursements	107.4	108.7	119.2	129.1	126.4	121.7	127.0	124.0	139.8	133.1
Pension expense	-	-	-	436.0	240.0	107.1	85.4	70.3	(47.9)	(33.8)
Total operating expenses	<u>289.5</u>	<u>300.6</u>	<u>298.7</u>	<u>737.8</u>	<u>538.4</u>	<u>402.2</u>	<u>411.4</u>	<u>417.0</u>	<u>307.2</u>	<u>323.1</u>
OPERATING INCOME BEFORE DEPRECIATION AND AMORTIZATION	286.8	336.5	394.0	31.6	223.0	356.8	362.6	327.4	429.3	452.6
DEPRECIATION AND AMORTIZATION	<u>48.4</u>	<u>49.6</u>	<u>58.0</u>	<u>56.4</u>	<u>68.0</u>	<u>71.1</u>	<u>74.6</u>	<u>79.9</u>	<u>82.5</u>	<u>86.8</u>
OPERATING INCOME	<u>238.4</u>	<u>286.9</u>	<u>336.0</u>	<u>(24.8)</u>	<u>155.0</u>	<u>285.7</u>	<u>288.0</u>	<u>247.5</u>	<u>346.8</u>	<u>365.8</u>
<b>NONOPERATING REVENUES (EXPENSES):</b>										
Interest income	0.3	0.4	(0.5)	3.1	0.6	10.3	5.1	21.0	17.0	1.7
Interest expenses	(81.7)	(92.2)	(98.8)	(106.1)	(107.9)	(108.3)	(91.3)	(97.0)	(95.9)	(94.0)
Swap termination fee	-	-	-	-	(101.7)	-	-	-	-	-
Other operating revenues	<u>1.1</u>	<u>0.5</u>	<u>(0.5)</u>	<u>0.2</u>	<u>0.6</u>	<u>3.2</u>	<u>2.1</u>	<u>3.5</u>	<u>4.7</u>	<u>2.0</u>
Total nonoperating expenses—net	<u>(80.3)</u>	<u>(91.3)</u>	<u>(99.8)</u>	<u>(102.8)</u>	<u>(208.4)</u>	<u>(94.8)</u>	<u>(84.1)</u>	<u>(72.5)</u>	<u>(74.2)</u>	<u>(90.3)</u>
TRANSFERS OUT	-	-	-	(0.6)	(2.4)	(2.1)	(2.4)	(2.7)	(2.4)	(2.4)
CHANGE IN NET POSITION	158.1	195.6	236.2	(128.2)	(55.8)	188.8	201.5	172.3	270.2	273.1
TOTAL NET POSITION—Beginning of year	<u>1,093.3</u>	<u>1,251.4</u>	<u>1,447.0</u>	<u>1,079.7</u>	<u>951.5</u>	<u>895.7</u>	<u>1,084.5</u>	<u>1,285.9</u>	<u>1,458.2</u>	<u>1,728.4</u>
TOTAL NET POSITION—End of year	<u>\$ 1,251.4</u>	<u>\$ 1,447.0</u>	<u>\$ 1,683.2</u>	<u>\$ 951.5</u>	<u>\$ 895.7</u>	<u>\$ 1,084.5</u>	<u>\$ 1,285.9</u>	<u>\$ 1,458.2</u>	<u>\$ 1,728.4</u>	<u>\$ 2,001.5</u>

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
NET POSITION BY COMPONENT  
TEN YEARS ENDED DECEMBER 31, 2012–2021  
(In millions)**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
NET POSITION:										
Net investment in capital assets	\$ 1,062.3	\$ 1,233.2	\$ 1,394.0	\$ 1,514.0	\$ 1,622.0	\$ 1,949.4	\$ 2,163.2	\$ 2,351.1	\$ 2,574.3	\$ 2,746.4
Restricted for capital projects	1.3	0.7	0.6	0.7	0.4	0.5	0.2	0.4	0.1	-
Unrestricted	<u>187.8</u>	<u>213.1</u>	<u>288.6</u>	<u>(563.2)</u>	<u>(726.7)</u>	<u>(865.4)</u>	<u>(877.5)</u>	<u>(893.3)</u>	<u>(846.0)</u>	<u>(744.9)</u>
TOTAL NET POSITION	<u>\$ 1,251.4</u>	<u>\$ 1,447.0</u>	<u>\$ 1,683.2</u>	<u>\$ 951.5</u>	<u>\$ 895.7</u>	<u>\$ 1,084.5</u>	<u>\$ 1,285.9</u>	<u>\$ 1,458.2</u>	<u>\$ 1,728.4</u>	<u>\$ 2,001.5</u>
	*			**						

\* Amounts were restated due to the implementation of GASB 65.

\*\* Amounts were restated due to the implementation of GASB 68.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
HISTORICAL FINANCIAL OPERATIONS  
TEN YEARS ENDED DECEMBER 31, 2012–2021  
(In millions)**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>OPERATING REVENUES:</b>										
Water sales	\$ 562.6	\$ 620.5	\$ 693.1	\$ 773.8	\$ 760.6	\$ 749.8	\$ 754.8	\$ 737.9	\$ 743.8	\$ 763.8
Other operating revenues	<u>13.7</u>	<u>16.6</u>	<u>22.1</u>	<u>19.2</u>	<u>25.6</u>	<u>29.4</u>	<u>27.4</u>	<u>26.9</u>	<u>22.2</u>	<u>27.1</u>
Total operating revenues	<u>576.3</u>	<u>637.1</u>	<u>715.2</u>	<u>793.0</u>	<u>786.2</u>	<u>779.2</u>	<u>782.2</u>	<u>764.8</u>	<u>766.0</u>	<u>790.9</u>
<b>OPERATING EXPENSES:</b>										
Source of supply	0.2	0.1	0.3	0.2	0.1	0.1	0.2	0.4	0.2	0.1
Power and pumping	41.7	43.2	43.1	41.3	39.6	41.4	41.1	42.5	40.7	45.2
Purification	56.1	60.9	58.5	57.1	57.5	60.5	62.9	67.8	61.8	62.3
Transmission and distribution	36.5	29.5	43.7	37.3	39.2	39.6	59.7	71.8	71.7	74.8
Provision for doubtful accounts	15.7	25.4	22.5	23.6	24.8	20.2	8.2	20.4	29.5	15.2
Customer accounting and collection	10.0	11.6	11.9	14.7	15.3	18.2	22.1	27.2	27.0	26.5
Administrative and general	21.9	21.2	22.0	22.1	20.3	13.6	13.0	13.0	13.9	14.9
Central services and General Fund reimbursements	107.4	108.7	119.3	129.1	126.4	121.7	127.0	124.0	139.8	133.1
Pension expense	<u>-</u>	<u>-</u>	<u>-</u>	<u>436.0</u>	<u>240.0</u>	<u>107.1</u>	<u>85.4</u>	<u>70.3</u>	<u>(47.9)</u>	<u>(33.9)</u>
Total operating expenses	<u>289.5</u>	<u>300.6</u>	<u>321.3</u>	<u>761.4</u>	<u>563.2</u>	<u>422.4</u>	<u>419.6</u>	<u>437.4</u>	<u>336.7</u>	<u>338.2</u>
INTEREST INCOME (OTHER THAN FROM CONSTRUCTIONAL ACCOUNT)	<u>0.3</u>	<u>0.4</u>	<u>(0.5)</u>	<u>3.1</u>	<u>0.6</u>	<u>10.2</u>	<u>5.1</u>	<u>21.0</u>	<u>17.0</u>	<u>1.7</u>
NET REVENUES—As defined (Note 4)	<u>\$ 287.1</u>	<u>\$ 336.9</u>	<u>\$ 393.4</u>	<u>\$ 34.7</u>	<u>\$ 223.6</u>	<u>\$ 367.0</u>	<u>\$ 367.7</u>	<u>\$ 348.4</u>	<u>\$ 446.3</u>	<u>\$ 454.4</u>

Source: City of Chicago Department of Water Management and Comptroller's Office.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
WATER SYSTEM ACCOUNTS  
TEN YEARS ENDED DECEMBER 31, 2012–2021**

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<b>Years Ended December 31</b>	<b>Nonmetered</b>	<b>Metered</b>	<b>Total</b>
2012	290,863	205,097	495,960
2013	273,426	220,759	494,185
2014	250,304	241,304	491,608
2015	227,801	266,284	494,085
2016	206,913	287,351	494,264
2017	190,276	303,877	494,153
2018	180,608	313,758	494,366
2019	178,348	316,262	494,610
2020	177,641	316,783	494,424
2021	176,931	317,398	494,329

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
TEN LARGEST SUBURBAN CUSTOMERS  
FOR THE YEAR ENDED DECEMBER 31, 2021  
(In thousands)**

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<b>Customer</b>	<b>Amount of Sales</b>
Dupage Water Commission	\$ 113,250
Oaklawn, Illinois	42,415
Northwest Suburban Municipal Joint Action Water Agency	41,655
Bedford Park, Illinois	28,736
Harvey, Illinois	14,265
Melrose Park, Illinois	14,074
Cicero, Illinois	10,590
Village of McCook, Illinois	9,148
Village of Alsip, Illinois	8,034
City of Berwyn	<u>7,598</u>
Total	<u>\$ 289,765</u>

Source: City of Chicago Department of Water Management.



**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
REVENUE BOND COVERAGE  
TEN YEARS ENDED DECEMBER 31, 2012–2021  
(In millions)**

**Prior Bonds Coverage Calculation**

**Combined prior Bonds, Senior Lien, and Second  
Lien Debt Service Calculation**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
REVENUES AVAILABLE FOR BONDS:										
Net revenues—as defined (Note 4)	\$ 287.1	\$ 336.9	\$ 393.4	\$ 34.7	\$ 223.6	\$ 367.0	\$ 367.7	\$ 348.4	\$ 446.3	\$ 454.4
Pension expense other than contribution (Note) <sup>(1)</sup>	-	-	-	423.3	227.6	82.7	53.3	30.3	(92.3)	(84.2)
Transfer from (to) Water Rate Stabilization account	(13.5)	(13.5)	-	-	-	-	-	-	-	-
Other Available Funds (Note) <sup>(2)</sup>	63.8	146.2	176.4	236.1	421.7	515.7	451.8	445.0	467.1	424.0
<b>NET REVENUES AVAILABLE FOR BONDS</b>	<b>\$ 337.4</b>	<b>\$ 469.6</b>	<b>\$ 569.8</b>	<b>\$ 694.1</b>	<b>\$ 872.9</b>	<b>\$ 965.4</b>	<b>\$ 872.8</b>	<b>\$ 823.7</b>	<b>\$ 821.1</b>	<b>\$ 794.2</b>
DEBT SERVICE REQUIREMENTS:										
Senior debt service requirements <sup>(4)</sup>	\$ 13.9	\$ 21.5	\$ 21.5	\$ 21.5	\$ 21.5	\$ 15.6	\$ 15.6	\$ 7.6	\$ -	\$ -
Senior debt service coverage ratio	24.3	21.8	26.5	32.3	40.6	61.9	55.9	109.1	-	-
Second lien debt service requirements	\$ 116.5	\$ 125.6	\$ 126.0	\$ 150.4	\$ 153.0	\$ 178.7	\$ 180.9	\$ 183.5	\$ 178.5	\$ 178.6
Subordinate lien debt service requirements	1.2	1.3	1.9	6.9	12.1	13.3	21.2	28.7	33.3	38.3
Total second and subordinate lien debt service requirements	\$ 117.7	\$ 126.9	\$ 127.9	\$ 157.3	\$ 165.1	\$ 192.0	\$ 202.1	\$ 212.2	\$ 211.8	\$ 216.9
<b>TOTAL COMBINED SENIOR, SECOND, AND SUBORDINATE LIEN DEBT SERVICE REQUIREMENTS</b>	<b>\$ 131.6</b>	<b>\$ 148.4</b>	<b>\$ 149.4</b>	<b>\$ 178.8</b>	<b>\$ 186.6</b>	<b>\$ 207.6</b>	<b>\$ 217.7</b>	<b>\$ 219.8</b>	<b>\$ 211.8</b>	<b>\$ 216.9</b>
<b>TOTAL COMBINED SENIOR AND SECOND LIEN DEBT SERVICE COVERAGE RATIO</b>	<b>2.6</b>	<b>3.2</b>	<b>3.8</b>	<b>3.9</b>	<b>4.7</b>	<b>4.7</b>	<b>4.0</b>	<b>3.7</b>	<b>3.9</b>	<b>3.7</b>
WATER RATE STABILIZATION ACCOUNT YEAR-END BALANCE <sup>(3)</sup>	\$ 74.9	\$ 88.4	\$ 88.4	\$ 91.2	\$ 91.2	\$ 90.5	\$ 89.4	\$ 91.2	\$ 93.2	\$ 91.7
TOTAL POPULATION SERVED	5,296,094	5,296,094	5,296,094	5,296,094	5,296,094	5,296,094	5,296,094	5,296,094	5,296,094	5,296,094
TOTAL LONG TERM DEBT	\$ 2,030.0	\$ 1,997.0	\$ 2,382.0	\$ 2,391.0	\$ 2,468.0	\$ 2,401.0	\$ 2,457.0	\$ 2,398.0	\$ 2,409.0	\$ 2,341.4
LONG TERM DEBT PER CUSTOMER SERVED	\$ 383.3	\$ 377.1	\$ 449.8	\$ 451.5	\$ 466.0	\$ 453.4	\$ 463.9	\$ 452.8	\$ 454.8	\$ 442.1

Source: City of Chicago Comptroller's Office; U.S. Department of Commerce - Census Bureau

<sup>(1)</sup> Of the (\$33.9) million of pension expense for 2021, \$50.3 million is the portion of the City's pension contribution payable in 2021 to the pension funds and allocable to the Water Fund.

The remaining portion of the pension expense for 2021, (\$84.2) million is recognized on the income statement of the Water Fund for 2021 pursuant to GASB 68 but is not due and payable by the City during 2021; accordingly, that portion is not included in Operating Expenses for purposes of calculation of the debt service coverage ratio.

<sup>(2)</sup> As provided in the Ordinance, Gross Revenues remaining in any period after providing sufficient funds for Operations and Maintenance Costs, for paying required debt service on all bonds and notes secured by Water System revenues, for paying any required amounts into any other accounts established for any bonds or notes secured by Water System revenues and to make any deposits into the Water Rate Stabilization Account ("Other Available Funds"), can be applied to debt service for any future period.

<sup>(3)</sup> The 2021 water rate stabilization balance includes a fair value adjustment of \$0.6 million. A fair value adjustment was not included in 2016 and prior balances.

<sup>(4)</sup> The 2000 Senior Liend Debt service was fully defeased in 2020 and therefore no outstanding debt at 12/31/2021.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
LONG-TERM DEBT  
TEN YEARS ENDED DECEMBER 31, 2012–2021  
(In millions)**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Senior lien bonds	\$ 60.7	\$ 49.0	\$ 37.5	\$ 26.2	\$ 15.0	\$ 9.6	\$ 4.6	\$ -	\$ -	\$ -
Second lien bonds	1,951.1	1,921.6	2,258.6	2,222.3	2,261.8	2,142.7	2,070.8	1,920.2	1,920.2	1,841.9
Commercial paper	-	-	-	-	-	-	-	-	-	-
Subordinate lien—IEPA loan	<u>18.4</u>	<u>26.3</u>	<u>85.7</u>	<u>142.9</u>	<u>191.6</u>	<u>248.7</u>	<u>381.9</u>	<u>477.8</u>	<u>488.6</u>	<u>499.5</u>
Total long-term debt	2,030.2	1,996.9	2,381.8	2,391.4	2,468.4	2,401.0	2,457.3	2,398.0	2,408.8	2,341.4
Accretion of capital appreciation bonds	47.7	43.9	39.1	33.3	26.3	18.4	9.4	-	-	-
Unamortized bond discount/premium—net	71.0	66.9	97.0	91.3	161.2	205.6	185.9	166.9	148.9	132.1
Unamortized deferred loss on bond refunding	<u>(36.2)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	<u>\$ 2,112.7</u>	<u>\$ 2,107.7</u>	<u>\$ 2,517.9</u>	<u>\$ 2,516.0</u>	<u>\$ 2,655.9</u>	<u>\$ 2,625.0</u>	<u>\$ 2,652.6</u>	<u>\$ 2,564.9</u>	<u>\$ 2,557.7</u>	<u>\$ 2,473.5</u>

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
CAPITAL IMPROVEMENT PROGRAM  
2022–2026  
(In thousands)**

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<b>Years</b>	<b>Amount</b>
2022	\$ 291,921
2023	354,318
2024	332,506
2025	374,506
2026	<u>354,397</u>
Total	<u>\$1,707,648</u>

Note: The information presented in the table above reflects the Water Fund’s expected allocation of resources to various projects, but does not necessarily represent an expectation of actual cash expenditures for these projects.

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
WATER SYSTEM PUMPAGE AND CAPACITY  
TEN YEARS ENDED DECEMBER 31, 2012–2021**

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<b>Years</b>	<b>Total Pumpage (MGD)</b>	<b>Average Daily Pumpage (MGD)</b>	<b>Maximum Daily Pumpage (MGD)</b>	<b>System's Rated Pumpage Capacity (MGD)</b>	<b>Maximum Daily Pumpage as % of Capacity</b>
2012	289,545	793	1,248	2,160	58
2013	276,039	756	1,095	2,160	51
2014	274,552	752	1,023	2,160	47
2015	262,606	719	890	2,160	41
2016	255,872	701	934	2,160	43
2017	248,371	680	1,089	2,160	50
2018	249,845	685	859	2,160	40
2019	241,359	661	838	2,160	39
2020	234,426	641	842	2,160	39
2021	237,554	651	836	2,160	39

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**MISCELLANEOUS STATISTICAL DATA  
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020**

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	<b>2021</b>	<b>2020</b>
AREA SERVED (In Square Miles):		
Chicago	228	228
125 suburbs	<u>578</u>	<u>578</u>
<b>TOTAL AREA SERVED</b>	<u><u>806</u></u>	<u><u>806</u></u>
WATER WORKS FACILITIES:		
Filtration plants	2	2
Continuous service capacity:		
South Water Filtration Plant (MGD)	720	720
Jardine Water Purification Plant (MGD)	1,440	1,440
Pumping stations—steam	3	3
Pumping stations—electric	9	9
Installed pumping capacity (MGD)	3,661	3,361
Crib intakes in service	2	2
Shore intakes (filtration plants)	2	2
Water supply tunnels (6 to 20 feet in diameter)—miles	64	64
DISTRIBUTION SYSTEM:		
Water mains (miles)	4,295	4,258
Fire hydrants	48,049	48,049
Valves	47,831	47,831

Note: Million Gallons Daily (MGD).

Source: City of Chicago Department of Water Management.

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
OPERATING INFORMATION BY FUNCTION  
TEN YEARS ENDED DECEMBER 31, 2012–2021  
(Number of employees)**

Function	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Administration	62	61	62	61	61	64	63	63	56	52
Agency management	37	37	34	36	36	35	37	37	35	31
Safety and security	16	16	26	27	27	21	21	21	53	52
Capital design and construction services	8	8	9	9	9	10	10	10	13	13
Engineering services	4	4	4	6	6	7	7	7	6	7
Inspection services	30	29	29	27	27	26	27	27	27	27
Water quality	48	47	47	47	47	46	45	58	53	50
Water pumping	234	222	220	214	214	215	213	213	205	200
Water treatment	323	336	334	344	344	343	343	343	343	324
Systems installation	34	75	76	75	75	65	65	65	62	56
Systems maintenance	583	542	527	520	520	471	449	449	425	411
Billings and customer service	50	50	48	46	46	45	45	45	38	35
Water meter installation and repair	<u>82</u>	<u>84</u>	<u>88</u>	<u>93</u>	<u>93</u>	<u>82</u>	<u>82</u>	<u>82</u>	<u>71</u>	<u>66</u>
Total	<u>1,511</u>	<u>1,511</u>	<u>1,504</u>	<u>1,505</u>	<u>1,505</u>	<u>1,430</u>	<u>1,407</u>	<u>1,420</u>	<u>1,387</u>	<u>1,324</u>

**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
POPULATION OF SERVICE AREA  
LAST FIVE CENSUS PERIODS**

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<b>Years</b>	<b>Chicago</b>		<b>Suburban Customers</b>		<b>Total</b>	<b>Number of Suburbs Served</b>
1980	3,005,072	(1)	1,152,614	(1)	4,157,686	75
1990	2,783,726	(1)	1,589,557	(2)	4,373,283	95
2000	2,896,016	(1)	2,410,021		5,306,037	125
2010	2,695,598	(1)	2,600,496		5,296,094	125
2020	2,695,598	(1)	2,600,496		5,296,094	123

(1) U.S. Department of Commerce—Census Bureau.

(2) 23 suburban customers not included (under the DWC contract; fully served May 1, 1992) with a population of 610,478, which increases total population to 4,983,761.

# CITY OF CHICAGO, ILLINOIS WATER FUND

## STATISTICAL DATA PRINCIPAL EMPLOYERS (NONGOVERNMENT) FOR THE YEAR ENDED DECEMBER 31, 2021, AND NINE YEARS AGO

Employer	2021 <sup>(1)</sup>			2012 <sup>(3)</sup>		
	Number of Employees	Rank	Percentage of Total City Employment	Number of Employees	Rank	Percentage of Total City Employment
Amazon.Com, Inc.	27,050	1	2.17 %	-	-	- %
Advocate Aurora Health	25,906	2	2.08	-	-	-
Northwest Memorial Healthcare	24,053	3	1.93	-	-	-
University of Chicago	20,781	4	1.67	-	-	-
Wal-Mart Stores Inc.	18,500	5	1.48	-	-	-
Walgreen Boots Alliance Inc.	16,817	6	1.35	2,789	10	0.26
JP Morgan & Co. <sup>(4)</sup>	14,583	7	1.17	8,168	1	0.76
United Continental Holdings Inc <sup>(5)</sup>	13,171	8	1.06	7,521	2	0.70
Amita Health	13,051	9	1.05	-	-	-
Jewel-Osco <sup>(6)</sup>	10,892	10	0.87	4,572	5	0.43
Accenture LLP	-	-	-	5,590	3	0.52
Northern Trust	-	-	-	5,448	4	0.51
Ford Motor Company	-	-	-	4,187	6	0.39
Bank of America NT & SA <sup>(7)</sup>	-	-	-	3,811	7	0.36
ABM Janitorial Midwest Inc	-	-	-	3,398	8	0.32
American Airlines	-	-	-	3,076	9	0.29

Notes:

<sup>(1)</sup> Source; Reprinted with permission from the February 22, 2022 issue of Crain's Chicago Business.  
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<sup>(2)</sup> Source; Bureau of Labor Statistics data used in calculation of total city employment.

<sup>(3)</sup> City of Chicago, Department of Revenue, Employer's Expense Tax Returns  
Prior to 2014, the source of the information was the City of Chicago, Bureau of Revenue-Tax Division Report which is no longer available.

<sup>(4)</sup> JP Morgan & Co. formerly known as JP Morgan Chase.

<sup>(5)</sup> United Continental Holdings Inc. Formerly known as United Airlines.

<sup>(6)</sup> Jewel-Osco formerly known as Jewel Foods Stores, Inc.

<sup>(7)</sup> Bank of America NT & SA formerly known as Bank of America NT



**CITY OF CHICAGO, ILLINOIS  
WATER FUND**

**STATISTICAL DATA  
POPULATION AND INCOME STATISTICS  
TEN YEARS ENDED DECEMBER 31, 2012–2021**

<b>Year</b>	<b>Population <sup>(1)</sup></b>	<b>Median Age <sup>(2)</sup></b>	<b>Number of Households <sup>(2)</sup></b>	<b>City Employment</b>	<b>Unemployment Rate <sup>(3)</sup></b>	<b>Per Capita Income <sup>(4)</sup></b>	<b>Total Income</b>
2012	2,695,598	33.2	1,054,488	1,144,896	8.9	\$ 48,305	\$130,210,861,390
2013	2,695,598	33.5	1,062,029	1,153,725	8.3	49,071	132,275,689,458
2014	2,695,598	33.9	1,031,672	1,264,234	5.7	50,690	136,639,862,620
2015	2,695,598	34.2	1,053,229	1,273,727	5.7	53,886	145,254,993,828
2016	2,695,598	34.4	1,053,986	1,282,117	5.0	55,621	149,931,856,358
2017	2,695,598	34.6	1,047,695	1,289,325	4.7	58,315	157,193,797,370
2018	2,695,598	34.9	1,077,886	1,288,755	4.0	61,089	164,671,386,222
2019	2,695,598	35.2	1,080,345	1,286,484	3.2	65,306	176,038,722,988
2020	2,695,598	N/A <sup>(5)</sup>	N/A <sup>(5)</sup>	1,165,441	8.2	67,671	182,413,812,258
2021	2,746,388	N/A <sup>(5)</sup>	N/A <sup>(5)</sup>	1,247,060	4.1	N/A <sup>(5)</sup>	N/A <sup>(5)</sup>

Notes:

<sup>(1)</sup> Source: U.S. Census Bureau.

<sup>(2)</sup> Source: U.S. Census Bureau-American Community Survey Data Estimate. Data Not Available for 2021.

Due to Covid-19 protocols the U.S. Census Bureau—American Community Survey (ACS) 1-year data for Median Age and Number of Households are not available for 2021. The reported values above are from the ACS 5-year data.

<sup>(3)</sup> Source: Bureau of Labor of Statistics for 2021, Unemployment rate for Chicago-Naperville-Illinois Metropolitan Area.

<sup>(4)</sup> Source: U.S. Department of Commerce Bureau of Economic Analysis Per Capital Personal Income for Chicago-Naperville-Illinois Metropolitan Area.

<sup>(5)</sup> N/A means not available at time of publication.

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**APPENDIX D**

**PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL**

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**APPENDIX D**

**PROPOSED FORM OF OPINIONS OF CO-BOND COUNSEL**

[Dated the Closing Date]

City of Chicago

The Bank of New York Mellon Trust Company  
N.A., as Trustee

Assured Guaranty Municipal Corp.

Re: City of Chicago  
Second Lien Water Revenue Bonds, Series 2023A  
Second Lien Water Revenue Refunding Bonds, Series 2023B

Ladies and Gentlemen:

We have acted as co-bond counsel in connection with the issuance by the City of Chicago (the “City”) of its \$254,210,000 aggregate principal amount Second Lien Water Revenue Bonds, Project Series 2023A (the “Series 2023A Bonds”) and its \$322,205,000 aggregate principal amount Second Lien Water Revenue Bonds, Refunding Series 2023B (the “Series 2023B Bonds” and, together with the Series 2023A Bonds, the “Bonds”). The Bonds are limited obligations of the City issued pursuant to the authority of Article VII, Section 6(a) of the Illinois Constitution of 1970 and ordinances adopted by the City Council of the City on June 27, 2018, October 27, 2021 and November 7, 2023, authorizing the Bonds (the “Ordinance”). The Bonds are being executed and delivered under an Amended and Restated Master Indenture of Trust Securing City of Chicago Second Lien Water Revenue Bonds, dated as of May 1, 2023 (the “Master Indenture”), as supplemented by the Thirteenth Supplemental Indenture Securing Second Lien Water Revenue Bonds, Project Series 2023A and Second Lien Water Revenue Bonds, Refunding Series 2023B, dated as of May 1, 2023 (the “Thirteenth Supplemental Indenture,” and together with the Master Indenture, the “Indenture”) from the City to The Bank of New York Mellon Trust Company, N.A. (as successor to American National Bank and Trust Company of Chicago and J.P. Morgan Trust Company, National Association), as trustee (the “Trustee”). The Bonds are being issued as Second Lien Bonds under the Indenture. Capitalized terms used herein without definition shall have the meanings assigned to such terms in the Indenture or the Ordinance.

The proceeds from the sale of the Bonds will be used to (i) pay for Project Costs, (ii) refund the Refunded Bonds, and (iii) pay costs of issuance of the Bonds.

The Bonds are issuable only as fully registered bonds without coupons in Authorized Denominations. The Series 2023A Bonds are dated the date hereof and are due on November 1 of each of the years and in the amounts and bear interest payable on May 1 and November 1 of each year, commencing November 1, 2023, at the rates per annum, as follows:

<u>Maturity (November 1)</u>	<u>Principal Amount</u>	<u>Rate Per Annum</u>	<u>Maturity (November 1)</u>	<u>Principal Amount</u>	<u>Rate Per Annum</u>
2048	\$38,010,000	5.25%	2058	\$ 12,000,000	5.00%
2053	59,875,000	5.25%	2062	144,325,000	5.50%

The Series 2023B Bonds are dated the date hereof and are due on November 1 of each of the years and in the amounts and bear interest payable on May 1 and November 1 of each year, commencing November 1, 2023, at the rates per annum, as follows:

Maturity (November 1)	Principal Amount	Rate Per Annum	Maturity (November 1)	Principal Amount	Rate Per Annum
2023	\$ 7,500,000	5.00%	2033	\$15,000,000	5.00%
2024	20,000,000	5.00%	2034	20,000,000	5.00%
2025	10,000,000	5.00%	2035	25,000,000	5.00%
2028	2,500,000	5.00%	2036	30,000,000	5.00%
2029	5,000,000	5.00%	2037	20,000,000	5.00%
2030	7,500,000	5.00%	2038	20,000,000	5.00%
2031	40,000,000	5.00%	2039	28,785,000	5.00%
2032	40,000,000	5.00%	2040	30,920,000	4.00%

The Bonds are subject to optional and mandatory sinking fund redemption at the times, in the manner and upon the terms specified in the Thirteenth Supplemental Indenture.

In connection with the issuance of the Bonds we have examined the following:

- (a) The Constitution of the State of Illinois and such laws as we deemed pertinent to this opinion;
- (b) Certified Copies of the Ordinance and the Master Indenture; and
- (c) An executed counterpart of the Thirteenth Supplemental Indenture; and
- (d) Such other documents and related matters of law as we have deemed necessary in order to render this opinion.

Based upon our examination of the foregoing, we are of the opinion that:

1. The City is a municipal corporation duly existing under the laws of the State of Illinois and is a home rule unit of local government within the meaning of Section 6(a) of Article VII of the 1970 Illinois Constitution. The City has all requisite power and authority under the Constitution and the laws of the State of Illinois to adopt the Ordinance, and under the Master Indenture and the Ordinance to enter into the Thirteenth Supplemental Indenture with the Trustee and to issue the Bonds thereunder.

2. The Ordinance is in full force and effect and is valid and binding upon the City in accordance with its terms. The Master Indenture and the Thirteenth Supplemental Indenture have been duly authorized, executed, and delivered by the City, constitute valid and binding obligations of the City and are legally enforceable in accordance with their respective terms.

3. The Bonds have been duly authorized and issued, are the legal, valid, and binding limited obligations of the City, have received all required approvals for their issuance, are entitled to the benefits and security of the Indenture, and are enforceable in accordance with their terms.

4. The Bonds are payable solely from Net Revenues, except for any monies, instruments and securities or any Qualified Reserve Account Credit Instrument on deposit in a Debt Service Reserve Account for any other series of Second Lien Bonds issued or to be issued, and from

certain other amounts, as provided in the Master Indenture and the Thirteenth Supplemental Indenture, and all other moneys and securities from time to time held by the Trustee under the terms of the Thirteenth Supplemental Indenture. The Bonds and the interest thereon are limited obligations of the City and do not constitute an indebtedness of the City within the meaning of any state constitutional or statutory provision or limitation as to indebtedness. The Bonds do not have a claim for payment from any taxes of the City. Neither the faith and credit nor the taxing power of the State of Illinois, the City or any political subdivision of the State of Illinois is pledged to the payment of the principal of, premium, if any, or interest on the Bonds.

5. The Bond Ordinance, the Master Indenture and the Thirteenth Supplemental Indenture create the valid and binding assignments and pledges which they purport to create of the amounts assigned and pledged to the Trustee under the Indenture, subject to the application thereof to the purposes and on the conditions permitted by the Indenture.

6. Subject to condition that the City comply with certain covenants made to satisfy pertinent requirements of the Internal Revenue Code 1986, as amended, under present law, in the opinion of Co-Bond Counsel, interest on the Bonds is excluded from the gross income of the owners thereof for federal income tax purposes, and is not included as an item of tax preference for purposes of the federal alternative minimum tax. Failure to comply with certain of such covenants could cause interest on the Bonds to be included in gross income retroactively to the date of issuance of the Bonds. Ownership of the Bonds may result in other federal tax consequences to certain taxpayers. We express no opinion regarding any such collateral consequences arising with respect to the Bonds. In rendering the foregoing opinion we have relied on certifications of the City with respect to certain material facts solely within its knowledge relating to the application of the proceeds of the Bonds, the application of the proceeds of the Refunded Bonds, the application of proceeds of the Refunded Bonds and certain other matters pertaining to the tax-exempt status of the Bonds. We are also relying, without independent investigation, on the verification report of Robert Thomas CPA, LLC, with respect to the mathematical computations of (i) the yield on the Bonds and the yield on certain investments and (ii) the sufficiency of amounts to be applied to the payment and redemption of the Refunded Bonds.

7. Interest on the Bonds is not exempt from present Illinois income taxes. Ownership of the Bonds may result in other state and local tax consequences to certain taxpayers, and we express no opinion regarding any such collateral consequences arising with respect to the Bonds.

In rendering this opinion, we advise you that the enforceability (but not the validity or binding effect) of the Bonds, the Ordinance, the Master Indenture and the Thirteenth Supplemental Indenture (i) may be limited by any applicable bankruptcy, insolvency, reorganization, moratorium, and other similar laws reflecting the rights or remedies of creditors now or hereafter in effect and (ii) is subject to principles of equity in the event that equitable remedies are sought, either in an action at law or in equity.

We express no opinion with respect to the Bonds or other matters related to the Bonds other than those specifically rendered here. Our opinion represents our professional judgment regarding the legal issues expressly addressed herein, and is not a guarantee of a result. This opinion is given as of the date hereof and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Respectfully submitted,

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**APPENDIX E**

**INFORMATION REGARDING THE CITY OF CHICAGO ECONOMY AND DEMOGRAPHICS**

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**APPENDIX E**

**INFORMATION REGARDING THE CITY OF CHICAGO ECONOMY AND DEMOGRAPHICS**

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*Set forth in this Appendix E is certain economic and demographic information regarding the City. Sources of information are set forth in footnotes. With respect to non-City sources, the City considers these sources to be reliable but has made no independent verification of the information provided and does not warrant its accuracy.*

## ECONOMY

The Chicago metropolitan area has a population of approximately 9.5 million people, with over 4.9 million employees.<sup>1,2</sup> The City’s workforce is spread across a diverse array of industries. With \$770 billion GDP (up 10.3% since 2020 according to the U.S. Bureau of Economic Analysis), Chicago metro area economy is 19<sup>th</sup> largest in the world, exceeding Sweden, Turkey and Poland’s economies.

The Chicago metropolitan area’s largest industry sectors by employment include trade, transportation and utilities; professional and business services; education and health services; government; leisure and hospitality; and manufacturing.<sup>3</sup> The regional economy is extremely diverse with no employment sector representing greater than 20% of the total.

TABLE 1. CHICAGO AREA EMPLOYMENT BY SECTOR (IN THOUSANDS) (FEBRUARY, 2023)<sup>4</sup>

Sector	Employees	Change from February 2022	
		Number	Percent
TOTAL NONFARM	4,673.1	93.0	2.0%
Mining and Logging	1.5	0.1	7.1
Construction	163.6	4.5	2.8
Manufacturing	408.8	6.7	1.7
Trade, Transportation and Utilities	958.4	10.1	1.1
Information	77.9	-1.1	-1.4
Financial Activities	312.5	-2.0	-0.6
Professional and Business Services	834.5	-6.6	-0.8
Education and Health Services	752.6	31.9	4.4
Leisure and Hospitality	446.4	39.7	9.8
Other Services	193.7	6.3	3.4
Government	523.2	3.4	0.7

## POPULATION

Chicago is home to more than 2.7 million people who live in more than one million households.<sup>5</sup> According to the 2020 Census, the City’s population is up 1.9 percent compared to the 2010 Census, increasing as a percent of the State population, which has a positive impact on certain revenue streams including water and wastewater revenue, local utility taxes, recreation taxes, PPRT, and business taxes.<sup>6</sup> The population of the United States, the State of Illinois, Cook County and the City for the census years 1980 to 2020 is shown in Table 2.

<sup>1</sup> U.S. Census Bureau, “Metropolitan and Micropolitan Statistical Areas Population Totals and Components of Change: 2020-2021, <https://www.census.gov/data/datasets/time-series/demo/popest/2020s-total-metro-and-micro-statistical-areas.html>.

<sup>2</sup> U.S. Bureau of Labor Statistics, “Civilian labor force and unemployment by state and metropolitan area,” <https://www.bls.gov/news.release/metro.t01.htm> (update released April 5, 2023).

<sup>3</sup> U.S. Bureau of Labor Statistics, “Chicago Area Economic Summary, Updated October 4, 2022,” [https://www.bls.gov/regions/midwest/summary/blssummary\\_chicago.pdf](https://www.bls.gov/regions/midwest/summary/blssummary_chicago.pdf).

<sup>4</sup> U.S. Bureau of Labor Statistics, “Chicago Area Employment” [https://www.bls.gov/regions/midwest/news-release/areaemployment\\_chicago.htm](https://www.bls.gov/regions/midwest/news-release/areaemployment_chicago.htm); released April 5, 2023.

<sup>5</sup> U.S. Census Bureau, “Resident population from decennial census.”

<sup>6</sup> See Footnote 5.

TABLE 2. POPULATION (1980-2020)<sup>7</sup>

Year	United States	State of Illinois	Cook County	Chicago
1980	226,545,805	11,427,409	5,253,655	3,005,072
1990	248,709,873	11,430,602	5,105,067	2,783,726
2000	281,421,906	12,419,293	5,376,741	2,896,016
2010	308,745,538	12,830,632	5,194,675	2,695,598
2020	331,449,281	12,812,508	5,275,541	2,746,388

Among the seven most populous cities in the U.S., Chicago has the highest share of residents age 25 and over with a college degree at 41.7% during the period from 2017 to 2021.<sup>8</sup>

### PER CAPITA INCOME AND WAGES

The per capita personal income (estimated annual earnings) for the United States, the State of Illinois, Cook County and the Chicago-Naperville-Elgin, IL-IN-WI Metropolitan Statistical Area (the “Chicago MSA”) is set forth in Table 3, for the years 2012 through 2021.<sup>9</sup>

<sup>7</sup> See Footnote 5.

<sup>8</sup> [www.census.gov/quickfacts/fact/table/chicagocityillinois,US/PST045221](http://www.census.gov/quickfacts/fact/table/chicagocityillinois,US/PST045221).

<sup>9</sup> The Chicago MSA comprises the following counties:

- Illinois: Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry and Will Counties;
- Indiana: Jasper, Lake, Newton and Porter Counties; and
- Wisconsin: Kenosha County.

TABLE 3. PER CAPITA INCOME (2012-2021)<sup>10</sup>

Year	United States <sup>11</sup>	State of Illinois <sup>12</sup>	Chicago MSA <sup>13</sup>	Cook County <sup>14</sup>
2012	44,548	46,029	48,804	45,697
2013	44,798	47,047	49,647	48,198
2014	46,887	49,238	52,501	49,399
2015	48,725	51,443	55,170	52,956
2016	49,613	52,036	55,800	55,700
2017	51,550	53,611	57,586	56,137
2018	53,786	56,536	60,938	57,966
2019	56,250	58,438	63,024	61,972
2020	59,763	62,139	66,474	63,971
2021	64,117	67,165	71,992	67,558

Median household income in the Chicago MSA in 2021 was \$78,166, compared to \$72,205 in the State of Illinois and \$69,717 in the United States.<sup>15</sup>

## EMPLOYMENT

Total employment for the State of Illinois, the Chicago MSA, Cook County and the City for the years 2012 through 2022 is set forth in Table 4.

<sup>10</sup> U.S. Bureau of Economic Analysis, Local Area Personal Income last updated: November 16, 2022 <https://www.bea.gov/data/income-saving/personal-income-county-metro-and-other-areas>. On November 14, 2019, the U.S. Bureau of Economic Analysis revised the statistics for 1998 through 2017. The figures presented here reflect the revised data and thus are not consistent with the City's past disclosure documents for its general obligation bonds.

<sup>11</sup> U.S. Bureau of Economic Analysis, Table SAINC1, [https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major\\_Area=3&State=00000&Area=00000&TableId=21&Statistic=3&Drill=1](https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major_Area=3&State=00000&Area=00000&TableId=21&Statistic=3&Drill=1).

<sup>12</sup> U.S. Bureau of Economic Analysis, Table SAINC1, [https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major\\_Area=3&State=00000&Area=17000&TableId=21&Statistic=3&Drill=1](https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major_Area=3&State=00000&Area=17000&TableId=21&Statistic=3&Drill=1).

<sup>13</sup> U.S. Bureau of Economic Analysis, Table CAINC1, [https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major\\_Area=5&State=17000&Area=16980&TableId=20&Statistic=3&Drill=1](https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major_Area=5&State=17000&Area=16980&TableId=20&Statistic=3&Drill=1).

<sup>14</sup> U.S. Bureau of Economic Analysis, Table CAINC1, [https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major\\_Area=4&State=17000&Area=17031&TableId=20&Statistic=3&Drill=1](https://apps.bea.gov/itable/index.html?appid=70&stepnum=40&Major_Area=4&State=17000&Area=17031&TableId=20&Statistic=3&Drill=1).

<sup>15</sup> U.S. Census Bureau, [https://data.census.gov/table?g=0100000US\\_0400000US17\\_310XX00US16980&tid=ACSDT1Y2021.B19013&tp=true](https://data.census.gov/table?g=0100000US_0400000US17_310XX00US16980&tid=ACSDT1Y2021.B19013&tp=true)

TABLE 4. EMPLOYMENT (2012-2022) (IN THOUSANDS)<sup>16</sup>

Year	State of Illinois <sup>17</sup>	Chicago MSA <sup>18</sup>	Cook County <sup>19</sup>	Chicago <sup>20</sup>
2012	5,989	4,447	2,406	1,232
2013	5,961	4,466	2,418	1,238
2014	6,052	4,541	2,456	1,257
2015	6,120	4,597	2,481	1,271
2016	6,173	4,649	2,500	1,282
2017	6,238	4,731	2,551	1,312
2018	6,282	4,766	2,561	1,320
2019	6,309	4,793	2,579	1,331
2020	5,781	4,386	2,351	1,216
2021	5,936	4,507	2,412	1,247
2022	6,142	4,701	2,526	1,306

The annual unemployment rates for the United States, the State of Illinois, Cook County, the Chicago MSA and the City are set forth in Table 5 for the years 2012 through 2022.

<sup>16</sup> U.S. Bureau of Labor Statistics, “Local Area Unemployment Statistics,” data expressed as average of 12-month data, except for 2022, which is an average of January - August 2022.

<sup>17</sup> U.S. Bureau of Labor Statistics, <https://data.bls.gov/timeseries/LAUST170000000000003>.

<sup>18</sup> U.S. Bureau of Labor Statistics, <https://data.bls.gov/timeseries/LAUMT171698000000003>.

<sup>19</sup> U.S. Bureau of Labor Statistics, <https://data.bls.gov/timeseries/LAUCN170310000000003>.

<sup>20</sup> U.S. Bureau of Labor Statistics, <https://data.bls.gov/timeseries/LAUCT171400000000003>.

TABLE 5. ANNUAL UNEMPLOYMENT RATES (2012-2022)<sup>21</sup>

Year	United States <sup>22</sup>	State of Illinois	Chicago MSA	Cook County	Chicago
2012	8.1	9.0	9.1	9.7	10.0
2013	7.4	9.1	9.1	9.7	10.1
2014	6.2	7.2	7.2	7.6	7.9
2015	5.3	6.0	6.0	6.3	6.7
2016	4.9	5.9	5.8	6.2	6.5
2017	4.4	4.9	4.9	5.1	5.4
2018	3.9	4.4	4.1	4.2	4.4
2019	3.7	4.0	3.9	3.9	4.1
2020	8.1	9.2	9.5	10.4	11.2
2021	5.4	6.1	6.2	7.1	7.6
2022	3.8	4.8	4.7	5.2	5.4

The percentage of total (non-farm) employment by major industry sector for the Chicago Metropolitan Division, State of Illinois and the United States for January 2023 is shown in Table 6. Note that totals may not sum due to rounding.

TABLE 6. PERCENTAGE OF TOTAL NON-FARM EMPLOYMENT BY MAJOR INDUSTRY SECTOR (JANUARY 2023)

Sector	United States <sup>23</sup>	Illinois <sup>24</sup>	Chicago Metropolitan Division <sup>25</sup>
Trade, Transportation and Utilities	18.6%	20.0%	20.4%
Education and Health Services	16.1	15.6	16.5
Professional and Business Services	14.7	16.0	18.9
Government	14.5	13.2	10.7
Leisure and Hospitality	10.6	9.7	9.5
Manufacturing	8.4	9.4	7.4
Financial Activities	5.9	6.6	7.3
Construction	5.1	3.8	3.2
Other Services	3.8	4.1	4.2
Information	2.0	1.5	1.9
Mining and Logging	0.4	0.1	0.0
TOTAL	100.0%	100.0%	100.0%

<sup>21</sup> See Footnote 15.

<sup>22</sup> U.S. Bureau of Labor Statistics, <https://data.bls.gov/timeseries/LNU04000000>.

<sup>23</sup> U.S. Bureau of Labor Statistics, "Current Employment Statistics (National)," <http://www.bls.gov/web/empstat/ceseeb1a.htm>.

<sup>24</sup> U.S. Bureau of Labor Statistics, <http://www.bls.gov/regions/midwest/illinois.htm>.

<sup>25</sup> U.S. Bureau of Labor Statistics, [http://www.bls.gov/regions/midwest/il\\_chicago\\_md.htm](http://www.bls.gov/regions/midwest/il_chicago_md.htm). The Chicago Metropolitan Division is a Census-defined area within the Chicago MSA. As of 2021, the Chicago Metropolitan Division consists of Cook, DuPage, McHenry, Will, Kendall, and Grundy counties. Kane County is part of the Elgin Metropolitan Division, Lake (IN), Porter, Jasper, and Newton counties are part of the Gary Metropolitan Division, and Lake (IL) and Kenosha counties are part of Kenosha-Lake County Metropolitan Division.



## EMPLOYERS

The Chicago MSA has thirty-five Fortune 500 and thirty-two S&P 500 headquarters, as shown in Table 7. The list is based on the 2022 Fortune 500 list and the current S&P 500 listing.

TABLE 7. FORTUNE 500 AND S&P 500  
COMPANIES HEADQUARTERED IN THE CHICAGO MSA (2022)<sup>26</sup>

Fortune Rank	S&P Rank	Company	Headquarters Location
18	249	Walgreens Boots Alliance	Deerfield, IL
38	142	Archer Daniels Midland	Chicago, IL
60	78	Boeing	Chicago, IL
63	19	AbbVie	North Chicago, IL
66	211	Allstate	Northbrook, IL
73	-	Caterpillar	Deerfield, IL
86	33	Abbott Laboratories	Abbott Park, IL
99	211	Exelon	Chicago, IL
117	-	US Foods Holding	Rosemont, IL
121	87	Mondelez International	Chicago, IL
139	244	Kraft Heinz	Chicago, IL and Pittsburgh, PA
146	398	United Airlines Holdings	Chicago, IL
152	31	McDonald's	Chicago, IL
166	275	CDW	Lincolnshire, IL
185	-	Jones Lang LaSalle	Chicago, IL
202	-	Tenneco	Lake Forest, IL
252	115	Illinois Tool Works	Glenview, IL
281	250	Discover Financial Services	Riverwoods, IL
283	388	LKQ	Chicago, IL
284	263	W.W. Grainger	Lake Forest, IL
292	256	Baxter International	Deerfield, IL
331	349	Conagra Brands	Chicago, IL
352	445	Molson Coors Beverage	Chicago, IL
369	-	Univar Solutions	Downers Grove, IL
376	-	Old Republic International	Chicago, IL
402	292	Ulta Beauty	Bolingbrook, IL
422	183	Arthur J. Gallagher	Rolling Meadows, IL
423	170	Motorola Solutions	Chicago, IL
433	323	Dover	Downers Grove, IL
441	423	Packaging Corp. of America	Lake Forest, IL
444	474	Fortune Brands Home & Security	Deerfield, IL
475	-	Camping World Holdings	Lincolnshire, IL
476	-	Ingredion	Westchester, IL
492	315	CF Industries Holdings	Deerfield, IL
493	329	Northern Trust	Chicago, IL
553	395	Zebra Technologies	Lincolnshire, IL
636	119	CME Group	Chicago, IL
711	345	Ventas	Chicago, IL
753	412	CBOE Global Markets	Chicago, IL
887	347	IDEX	Northbrook, IL

In 2020, there were 327 corporate facility investment projects in the Chicago MSA; in 2021, there were 441 such projects.<sup>27</sup>

<sup>26</sup> All data other than S&P 500 Rankings from *Fortune* Magazine: <https://fortune.com/fortune500>. S&P 500 rankings from Slickcharts: <https://www.slickcharts.com/sp500>. Kraft Heinz maintains co-headquarters, one of which is located in the City.

<sup>27</sup> Site Selection Magazine, issues ranking Chicago MSA the “Top Metro” for new and expanded corporate facilities.

Of particular note, in 2021 and 2022, four Fortune 500 companies, the Kimberly-Clark Corporation (“**Kimberly-Clark**”), Discover Financial Services (“**Discover**”), the Kellogg Company (d.b.a. Kellogg’s) (“**Kellogg’s**”), and Alphabet Inc. subsidiary, Google LLC (“**Google**”), announced significant expansions in the Chicago metropolitan area.

- In 2021, Kimberly-Clark announced the relocation of their North American commercial center to the City’s Fulton Market. The relocation is expected to add 250 jobs to the 90 jobs Kimberly-Clark already had in the City.<sup>28</sup>
- In 2021, Discover opened a call center in the City’s Southside neighborhood of Chatham in a redeveloped, formerly abandoned Target shopping center. The call center, which currently employs approximately 500, is expected to house 1,000 employees by 2024. The Discover Chatham facility, which is expected to hire most workers from within a 5-mile radius of the facility, has received the highest customer ratings among call centers in Discover’s operation since opening.<sup>29</sup>
- In June 2022, Kellogg’s announced they would be splitting their company into three business units, with its snack division being globally headquartered in the City. The snack division is Kellogg’s largest business unit, generating \$11.4 billion of the company’s \$14.2 billion of revenue in 2021.<sup>30</sup>
- In July 2022, Google announced it will move into the Thompson Center, occupying its full 1.2 million square feet. This expansion builds on their current footprint in Fulton Market, where they employ nearly 2,000 people. Thousands of new Google jobs are expected to be located at the Thompson Center over time, with redevelopment expected to be completed by 2026.<sup>31</sup>

In addition to the Fortune 500 and S&P 500 companies headquartered in the Chicago MSA, there are many companies not on those two lists that are located in or near the City. World Business Chicago (“**WBC**”), the City’s public-private economic development agency, notes that there are more than 400 major corporate headquarters, offices or facilities located in the Chicago MSA.<sup>32</sup> Furthermore, WBC calculates that there were 173 pro-Chicago decisions (either corporate relocations or expansions) in 2021, and 145 in 2022 as of November 3, 2022, which brought nearly 20,000 jobs, that in turn have created an additional 30,000 jobs.<sup>33</sup>

In addition, the City has been recognized with the following accolades or rankings:

- #1 most diversified economy of the largest U.S. metros by employment;<sup>34</sup>
- Named “Top Metro” for 9<sup>th</sup> year in a row by Site Selection Magazine (2021);

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<sup>28</sup> <https://www.chicagotribune.com/columns/ryan-ori/ct-biz-kimberly-clark-adding-250-jobs-ryan-ori-20210414-sc3ofe31cvgr712c44usnebzpy-story.html>.

<sup>29</sup> <https://news.wttw.com/2022/11/12/one-year-discover-s-chatham-customer-care-center-still-banking-community>;  
<https://blockclubchicago.org/2022/08/02/closed-target-store-in-chatham-re-opens-as-a-discover-customer-center-with-a-promise-of-1000-jobs/>  
<https://chicago.suntimes.com/business/2021/9/20/22676556/discover-chatham-call-center-highest-customer-service-ratings-financial-company-credit-cards>.

<sup>30</sup> <https://news.wttw.com/2022/06/21/kellogg-split-3-companies-corporate-hq-high-growth-snacks-company-coming-chicago>.

<sup>31</sup> <https://news.wttw.com/2022/07/27/google-buys-thompson-center-will-preserve-much-loved-loathed-loop-landmark>;  
<https://www.wbez.org/stories/google-to-buy-renovate-chicagos-thompson-center/24ef61cb-466e-4728-a646-50df996a6eb1>.

<sup>32</sup> World Business Chicago. <http://www.worldbusinesschicago.com>.

<sup>33</sup> <https://worldbusinesschicago.com/app/uploads/2022/11/Dashboard-v90.3.pdf>.

<sup>34</sup> <https://infograph.venngage.com/pl/e9UPAnslJ0Q>.

- #1 startup ecosystem for female founders and the largest percentage of women-founded startups in the world;<sup>35</sup>
- #1 city for highest venture capital multiple on invested capital (\$9.8 billion in growth capital in 2021, nearly \$7 billion which is venture capital, double that of 2020);<sup>36</sup>
- #2 largest transportation and logistics sector in the country;<sup>37</sup>
- #2 host to top 250 conventions in 2022;<sup>38</sup>
- #1 U.S. city for foreign direct investment and #1 U.S. city for corporate expansion and growth per IBM Global Location Trends for 8 and 9 consecutive years, respectively;
- #2 largest metropolitan statistical area in the U.S. as of July 2022 in terms of employees in manufacturing occupations with 417,000 employees;<sup>39</sup>
- #2 ranking in “The 53 Best Cities in the World in 2022” by Time Out Media;<sup>40</sup>
- Voted “Best Big City in the U.S.” for 6th year in a row by Condé Nast (2022);<sup>41</sup> and
- McCormick Place is the largest convention center in North America.<sup>42</sup>

The non-governmental employers employing the greatest number of workers in the Chicago MSA as of the end of 2020 are set forth in Table 8.

TABLE 8. LARGEST NON-GOVERNMENTAL EMPLOYERS IN CHICAGO MSA (2020)<sup>43</sup>

Employer	Number of Employees	Percentage of Total Employment
Amazon.com Inc	27,050	2.17%
Advocate Aurora Healthcare	25,906	2.08
Northwestern Memorial Healthcare	24,053	1.93
University of Chicago	20,781	1.67
Walmart Inc	18,500	1.48
Walgreens Boots Alliance Inc	16,817	1.35
JPMorgan Chase & Co	14,583	1.17
United Continental Holdings Inc.	13,171	1.06
Amita Health	13,051	1.05
Jewel-Osco	10,892	0.87

<sup>35</sup> <https://startupgenome.com/fr/articles/chicago-top-ecosystem-for-female-founders>.

<sup>36</sup> World Business Chicago.

<sup>37</sup> <https://worldbusinesschicago.com/app/uploads/2022/10/April-2022-Logistics-Tech-WBC-Chicago-Business-Bulletin.pdf>.

<sup>38</sup> <https://www.simpleviewinc.com/blog/stories/post/destinations-to-host-the-mint-top-250-conventions-in-2022/>.

<sup>39</sup> [https://www.bls.gov/regions/midwest/news-release/areaemployment\\_chicago.htm](https://www.bls.gov/regions/midwest/news-release/areaemployment_chicago.htm).

<sup>40</sup> <https://www.timeout.com/chicago/news/chicago-is-officially-the-2nd-best-city-in-the-world-071222>.

<sup>41</sup> <https://www.cntraveler.com/gallery/best-cities-us>;  
<https://www.marketwatch.com/story/this-big-city-is-americas-favorite-for-a-sixth-straight-year-says-conde-nast-traveler-11664912813>.

<sup>42</sup> <https://www.mccormickplace.com/>.

<sup>43</sup> Reprinted with permission from the February 21, 2021 issue of *Crain's Chicago Business*, © 2022 Crain Communications Inc. All Rights Reserved.

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**APPENDIX F**  
**REFUNDED BONDS**

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**APPENDIX F**

**REFUNDED BONDS**

<b>Prior Bond Issue</b>	<b>Maturity (November 1)</b>	<b>Interest Rate</b>	<b>Principal Amount Refunded</b>	<b>Redemption Date</b>	<b>Redemption Price</b>	<b>CUSIP*</b>
2008	2024	5.00%	\$ 4,870,000	June 8, 2023	100%	167736R90
2008	2025	5.00%	\$ 5,115,000	June 8, 2023	100%	167736R33
2008	2026	5.00%	\$ 5,370,000	June 8, 2023	100%	167736M46
2008	2027	5.00%	\$ 5,640,000	June 8, 2023	100%	167736M53
2008	2028	5.00%	\$ 5,920,000	June 8, 2023	100%	167736S24
2008 Term Bond	2029	5.25%	\$ 6,215,000	June 8, 2023	100%	167736S40
2008 Term Bond	2030	5.25%	\$ 6,540,000	June 8, 2023	100%	167736S40
2008 Term Bond	2031	5.25%	\$ 6,885,000	June 8, 2023	100%	167736S40
2012	2024	5.00%	\$ 8,915,000	June 8, 2023	100%	167736ZZ3
2012	2025	5.00%	\$11,510,000	June 8, 2023	100%	167736ZF7
2012	2026	5.00%	\$12,085,000	June 8, 2023	100%	167736ZG5
2012	2027	5.00%	\$12,690,000	June 8, 2023	100%	167736ZH3
2012	2028	5.00%	\$13,325,000	June 8, 2023	100%	167736ZJ9
2012	2029	5.00%	\$13,990,000	June 8, 2023	100%	167736ZK6
2012	2030	5.00%	\$14,690,000	June 8, 2023	100%	167736ZL4
2012	2031	5.00%	\$15,425,000	June 8, 2023	100%	167736ZM2
2012	2032	5.00%	\$16,195,000	June 8, 2023	100%	167736ZN0
2012 Term Bond	2033	4.00%	\$17,005,000	June 8, 2023	100%	167736ZP5
2012 Term Bond	2034	4.00%	\$17,685,000	June 8, 2023	100%	167736ZP5
2012 Term Bond	2035	4.00%	\$18,390,000	June 8, 2023	100%	167736ZP5
2012 Term Bond	2036	4.00%	\$19,125,000	June 8, 2023	100%	167736ZP5
2012 Term Bond	2038	5.00%	\$20,685,000	June 8, 2023	100%	167736ZQ3
2012 Term Bond	2039	5.00%	\$21,720,000	June 8, 2023	100%	167736ZQ3
2012 Term Bond	2040	5.00%	\$22,810,000	June 8, 2023	100%	167736ZQ3
2012 Term Bond	2041	5.00%	\$23,950,000	June 8, 2023	100%	167736ZQ3
2012 Term Bond	2042	5.00%	\$25,145,000	June 8, 2023	100%	167736ZQ3

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\* CUSIP data herein is provided by CUSIP Global Services (“CGS”). CGS is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. Neither the City, the Financial Advisors nor the Underwriters (as defined herein) or their agents or counsel is responsible for the selection, use or accuracy of the initial CUSIP numbers nor is any representation made as to their correctness with respect to the Refunded Bonds, as applicable, as included herein or at any time in the future. The initial CUSIP number for a specific series, maturity, interest rate, and call date is subject to being changed after the issuance of the Refunded Bonds, as applicable, as a result of various subsequent actions including, but not limited to, a refunding in whole or in part, or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Bonds, as applicable.

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**APPENDIX G**

**SPECIMEN MUNICIPAL BOND INSURANCE POLICY**

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## MUNICIPAL BOND INSURANCE POLICY

ISSUER:

Policy No: -N

BONDS: \$ in aggregate principal amount of

Effective Date:

Premium: \$

ASSURED GUARANTY MUNICIPAL CORP. ("AGM"), for consideration received, hereby UNCONDITIONALLY AND IRREVOCABLY agrees to pay to the trustee (the "Trustee") or paying agent (the "Paying Agent") (as set forth in the documentation providing for the issuance of and securing the Bonds) for the Bonds, for the benefit of the Owners or, at the election of AGM, directly to each Owner, subject only to the terms of this Policy (which includes each endorsement hereto), that portion of the principal of and interest on the Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Issuer.

On the later of the day on which such principal and interest becomes Due for Payment or the Business Day next following the Business Day on which AGM shall have received Notice of Nonpayment, AGM will disburse to or for the benefit of each Owner of a Bond the face amount of principal of and interest on the Bond that is then Due for Payment but is then unpaid by reason of Nonpayment by the Issuer, but only upon receipt by AGM, in a form reasonably satisfactory to it, of (a) evidence of the Owner's right to receive payment of the principal or interest then Due for Payment and (b) evidence, including any appropriate instruments of assignment, that all of the Owner's rights with respect to payment of such principal or interest that is Due for Payment shall thereupon vest in AGM. A Notice of Nonpayment will be deemed received on a given Business Day if it is received prior to 1:00 p.m. (New York time) on such Business Day; otherwise, it will be deemed received on the next Business Day. If any Notice of Nonpayment received by AGM is incomplete, it shall be deemed not to have been received by AGM for purposes of the preceding sentence and AGM shall promptly so advise the Trustee, Paying Agent or Owner, as appropriate, who may submit an amended Notice of Nonpayment. Upon disbursement in respect of a Bond, AGM shall become the owner of the Bond, any appurtenant coupon to the Bond or right to receipt of payment of principal of or interest on the Bond and shall be fully subrogated to the rights of the Owner, including the Owner's right to receive payments under the Bond, to the extent of any payment by AGM hereunder. Payment by AGM to the Trustee or Paying Agent for the benefit of the Owners shall, to the extent thereof, discharge the obligation of AGM under this Policy.

Except to the extent expressly modified by an endorsement hereto, the following terms shall have the meanings specified for all purposes of this Policy. "Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in the State of New York or the Insurer's Fiscal Agent are authorized or required by law or executive order to remain closed. "Due for Payment" means (a) when referring to the principal of a Bond, payable on the stated maturity date thereof or the date on which the same shall have been duly called for mandatory sinking fund redemption and does not refer to any earlier date on which payment is due by reason of call for redemption (other than by mandatory sinking fund redemption), acceleration or other advancement of maturity unless AGM shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment made to an Owner by or on behalf of the Issuer which has been recovered from such Owner pursuant to the

United States Bankruptcy Code by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to AGM which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer or any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds.

AGM may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes of this Policy by giving written notice to the Trustee and the Paying Agent specifying the name and notice address of the Insurer's Fiscal Agent. From and after the date of receipt of such notice by the Trustee and the Paying Agent, (a) copies of all notices required to be delivered to AGM pursuant to this Policy shall be simultaneously delivered to the Insurer's Fiscal Agent and to AGM and shall not be deemed received until received by both and (b) all payments required to be made by AGM under this Policy may be made directly by AGM or by the Insurer's Fiscal Agent on behalf of AGM. The Insurer's Fiscal Agent is the agent of AGM only and the Insurer's Fiscal Agent shall in no event be liable to any Owner for any act of the Insurer's Fiscal Agent or any failure of AGM to deposit or cause to be deposited sufficient funds to make payments due under this Policy.

To the fullest extent permitted by applicable law, AGM agrees not to assert, and hereby waives, only for the benefit of each Owner, all rights (whether by counterclaim, setoff or otherwise) and defenses (including, without limitation, the defense of fraud), whether acquired by subrogation, assignment or otherwise, to the extent that such rights and defenses may be available to AGM to avoid payment of its obligations under this Policy in accordance with the express provisions of this Policy.

This Policy sets forth in full the undertaking of AGM, and shall not be modified, altered or affected by any other agreement or instrument, including any modification or amendment thereto. Except to the extent expressly modified by an endorsement hereto, (a) any premium paid in respect of this Policy is nonrefundable for any reason whatsoever, including payment, or provision being made for payment, of the Bonds prior to maturity and (b) this Policy may not be canceled or revoked. THIS POLICY IS NOT COVERED BY THE PROPERTY/CASUALTY INSURANCE SECURITY FUND SPECIFIED IN ARTICLE 76 OF THE NEW YORK INSURANCE LAW.

In witness whereof, ASSURED GUARANTY MUNICIPAL CORP. has caused this Policy to be executed on its behalf by its Authorized Officer.

ASSURED GUARANTY MUNICIPAL CORP.

By \_\_\_\_\_  
Authorized Officer

A subsidiary of Assured Guaranty Municipal Holdings Inc.  
1633 Broadway, New York, N.Y. 10019  
(212) 974-0100

Form 500NY (5/90)



